Bird Notes

VOL. VI.

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THE JOURNAL OF THE FOREIGN BIRD CLUB
FOR THE STUDY OF ALL SPECIES OF BIRDS
IN FREEDOM AND CAPTIVITY.

VOLUME VI.

"*By mutual confidence and mutual aid*
Great deeds are done and great discoveries made."

EDITED BY
WESLEY T. PAGE, F.Z.S.

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1907—1908.

Из. библ. Андга

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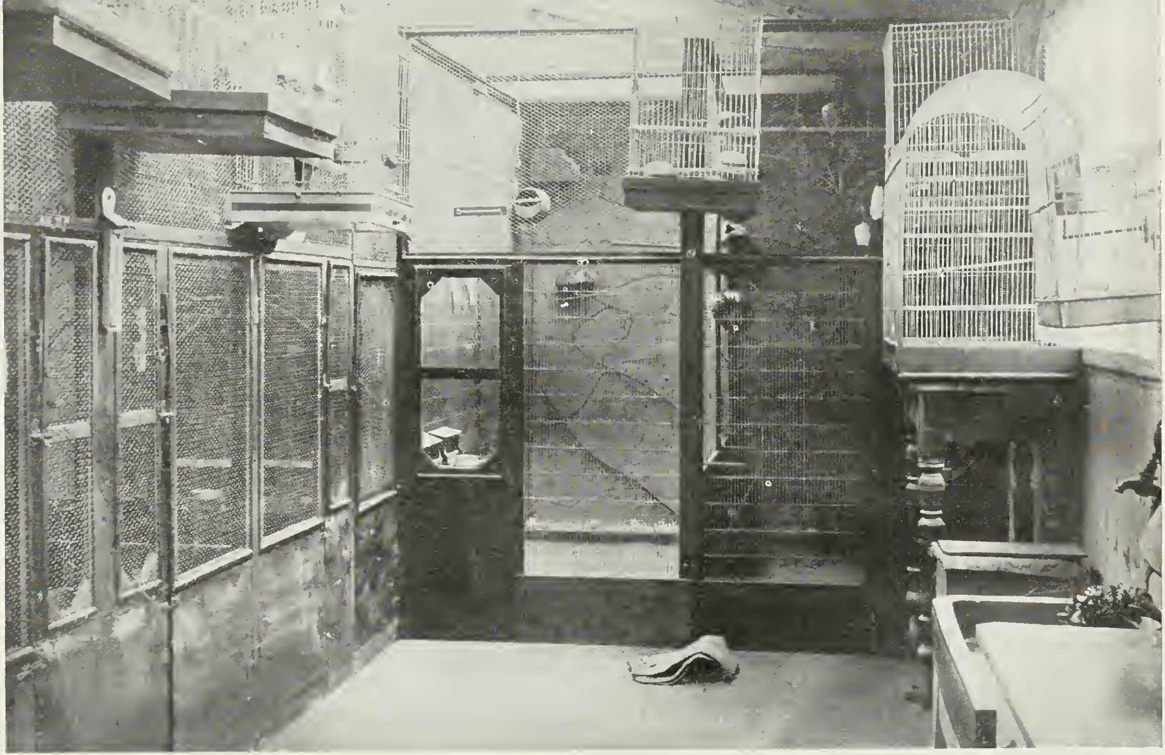

MR. FOSTER'S BIRDROOM.

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BIRD NOTES:

THE JOURNAL OF

THE FOREIGN BIRD CLUB.

Mr. Foster's Aviaries.

INSIDE AVIARY OR BIRD ROOM.

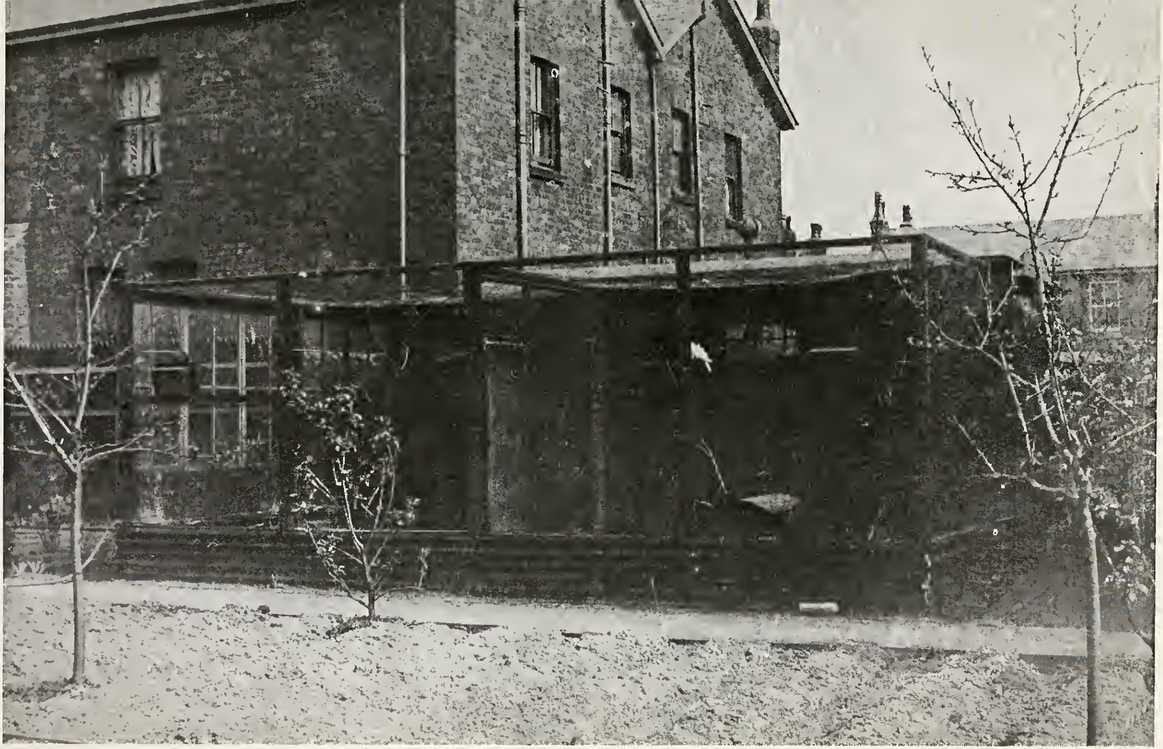
Building 30ft. long, 15ft. wide, 8ft. high; brick on one side and end, others glass and corrugated iron; also roof part glass and iron, all lined with felt and wood; ventilator on the top; and part of the glass front opens out. I have two rows of 4in. hot water pipes for use in winter. This place is divided into eight separate aviaries about 8ft. by 4ft. by 8ft. high; there is a slate trough runs right through the whole and water is changed every day from tap. Food in separate boxes with glass fronts; a portion of each aviary contains sand gravel and soil; the whole floor is concrete and a portion of each is covered with good pine sawdust changed every Saturday. I use all enamelled dishes for soft food.

One division contains a splendid Shâma; 2nd, Norwich Canaries; 3rd, Yorkshires; 4th, Avadavats, Waxbills, Bengalese; 5th, Weavers, Orange Bishops, Napoleons, Mannikins, Ribbon Finches; the one in corner on the left contains insectivorous birds, viz., Red-breasted Troupial, American Blue Robin, Madagascar Weaver, two Saffron Finches, two Red-crested Cardinals, Crested Mynah, two Military Troupials; in the end one seen in photo. are Java Sparrows, the other Budgerigars and a Parson Finch.

The cages contain a fine Amazon Parrot, 2 Black-headed Conures, Ring-necked Parrakeet, Rosella, and 2 Orange-flanked Parrakeets which talk. It is very interesting to sit and watch them. There is a sink with water laid on, all shown in the photo. Some of these birds I have had as long as ten years ; I lost in the moult this year a good Goldfinch mule I had had over twelve years.

OUTSIDE AVIARY.

24ft. long, 9ft. wide, 8ft. high, with inner covered shed 16ft. long, 5ft. wide, 7ft. high, with Acme ventilator on the top which is always open. The outer and inner aviary is divided into two equal portions and water is laid on to a trough in the centre ; one end is protected from winds by glass shutters and the whole is covered with ½in. mesh wire. One portion contains a pair of Golden Pheasants, three Thrushes, Brown Linnets, Greenfinches, Doves, Chaffinches and Siskins ; the other a pair of Golden Pheasants, four Starlings, Thrush, Larks, Yellowhammers, Siskins, Linnets, Goldfinches, Chaffinches, Partridges, a pair of Californian Quails, and Bramblefinches. These birds all agree very well together, although the Thrushes have a slight flourish now and again ; I have bred the Golden Pheasants in the aviary. I had it planted with shrubs, but they soon destroyed them, leaving bare stumps. I got a quantity of heather and made a shady corner at the back, and it makes good cover for them ; some of them have nested but not hatched out. They stop out all the winter and have done so for two or three years.



MR. FOSTER'S OUTDOOR AVIARY

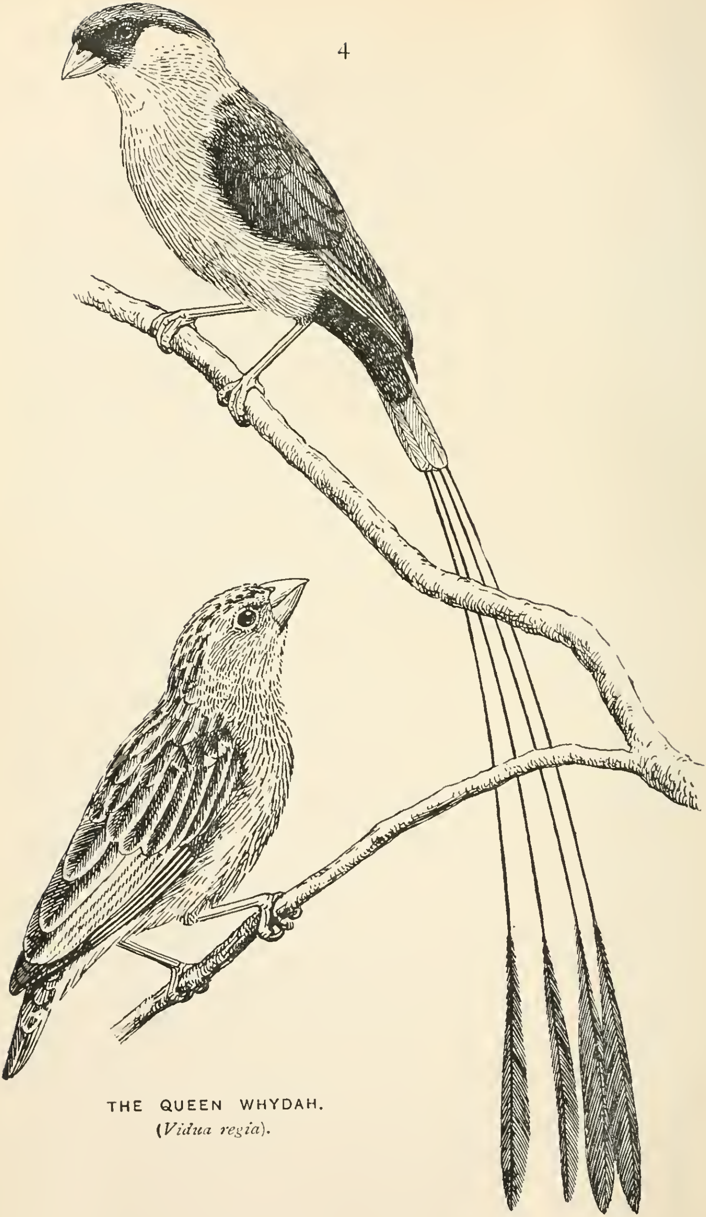
Breeding Experiences.

By Miss THEODORA SAYWELL.

This last summer I have been rather successful in breeding foreign birds.

With two pairs of green Budgerigars I have eight pairs of young, not losing any. They were fine healthy little things and very tame. On my coming to feed them every morning they would fly to the aviary doors to meet me, making a chorus of sound enough to deafen one. They were very fond of bread and milk, and this I give them fresh every day in addition to the ordinary seed. Next summer I hope to be as successful with the yellow Budgerigars, as they are, I think, much prettier than the green.

In another partition a pair of Zebra Finches made me a present of three young ones; two of them flourished well and grew up strong and healthy. The third however was a weakly little thing, so I took it into the house when it grew older and kept it in a box cage. It became a most delightful pet, and so tame that it would eat from my hand, without the slightest sign of timidity. One day when it was taking seed from my fingers, our cat crept up without my being aware of its proximity and with one spring caught the little thing in its mouth. I rescued it again, but alas! too late, it was dead. At that moment I could have killed the cat with pleasure, but on reflection, calmer thoughts prevailed. This however was my only mishap, so I think on the whole, I have been very fortunate.



THE QUEEN WHYDAH.
(*Vidua regia*).

The Queen Whydah.

(Vidua regia.)

By Wesley T. Page, F.Z.S.

This species, to my mind, one of the finest of this interesting group, is of a handsome and striking appearance; its well contrasted plumage of black, tawny, white and buff being very glossy, silken, and rich in colour. Its fine caudal plumes (about 5in.) are bare for almost three parts their length, the remaining portion being webbed on both sides the shaft, and are of a racquet- or paddle-shaped form; this is clearly brought out in Mr. Goodchild's characteristic line drawing. In the Western Aviary at the Zoo. there are several of these striking birds in the enclosure devoted to Whydahs, where they have a fine and striking appearance as they disport themselves among the branches in both a graceful and fascinating manner. It is very noticeable when comparing them with *V. paradisea*, that the flight is not so heavy and that their long tails do not impede their flight to any appreciable extent. They have not much song to boast of, but what there is of it, is not so scratchy in tone as that of the majority of this group. It has an exceptionally fine appearance in an outdoor aviary among growing plants and bushes.

Plumage: Adult male. In full colour, has the crown, back, wing coverts, secondaries and four central tail feathers, velvety-black; outer tail feathers, brown with a white spot near the end of inner web; primaries and primary coverts, brown edged with whitish; there is a tawny band or collar round the back of the neck; the sides of neck, cheeks, and under surface of body, warm tawny-buff; sides, flanks, and thighs, dark tawny; sides of vent and under tail coverts, black; there is a tuft of white on the flanks, and the under wing coverts are also white; iris, nut brown; beak, legs and feet, red. Total length 12in.

Adult female. This is very similar to its near relative the Paradise Whydah, but lacks the reddish-buff crown and eyestreak of *V. paradisea*, the crown is whitish, streaked with dusky and brown.

Young: Nearly uniform brown; lower surface of body, eyebrow, ear coverts and sides of face, buffish-yellow. (Stark).

The adult male out of colour closely resembles the female, but is a little larger.

Habitat: From Colesberg in Cape Colony to the Zambesi river, Damara Land and Benguela. From the Vaal river to the Zambesi. (Stark).

Habits: According to the various reports of Field Naturalists and travellers it frequents grassy plains and marshy ground interspersed with groves of trees and bushes. They are polygamous and each male is accompanied by from ten to twenty females. At this period the males are very pugnacious, constantly chasing and fighting one another. More active birds than *V. paradisea*.

Mr. Townsend who exhibited a fine pair of this species at L.C.B.S. Show, Horticultural Hall, found them timid and restless in a cage, but improving somewhat in this respect later. Also the male was very lavish in the mornings with his little if not lovely song. This may be their demeanour in the cage, but it certainly is not so in the aviary, those already mentioned at the Zoo. do not appear to mind visitors in their enclosure in the least, and are far more active and in evidence than their congeners *V. paradisea*.

Diet: It is scarcely necessary to mention this in *Bird Notes*, but canary, white and spray millet, a few oats, green food (flowering grass, lettuce, etc.) and a few mealworms or other insects as obtainable will about fill up their simple bill of fare.

Popular or Dealers' names: These are too often a "delusion and a snare," for while Shaft-tailed Whydah is the name dealers give to *V. paradisea*, yet that is the appellation which Stark (Birds of Africa) gives to this species. Racquet-tailed Whydah is better and equally descriptive, but I prefer the name appearing at head of this paper, and which is that adopted by the Zoological Society.

Wanderings in the Zoo.

By J. E. R. McDonagh, M.R.C.S., F.Z.S.

As it is some time since last I wrote I propose in this issue to mention a few of the most important additions to the Zoological Gardens recently.

The Gardens are just as interesting, if not more so, at this time of year, as far as the birds are concerned, for most are in their best plumage, and others have doffed their winter wear, and comparing this with the summer season it is often hard to realise that the birds are the same. This is illustrated most effectually in the Gull Aviary, where it will be noticed that the Black-headed Gulls have no longer black heads, and many people are ignorant of the fact that the Gull which, has in recent years, since about 1896, visited London, and amused hundreds of spectators on

Blackfriars and other bridges is the Gull in question, without his black cap.

How does he lose his summer head gear? Not as most believe by moulting, nor by extraction of the black pigment by cells which Metchnikoff has described in other instances, as phagocytes, but by the black tips of the white feathers falling off in this season, and the way he regains his summer coat is by a spring moult, when he sheds his "betipped" white ones and grows a pure white feather again with a triangular patch of black at its end.

Adjoining the Gull aviary, in the Seal pond, is a white variety of the Black-footed Penguin, not a pure albino as his wings are a normal colour, also his tail, pupils and irides are not red, this anomaly being quite common in the bird world, and is often seen in pheasants.

Opposite the Seal pond, and between the Monkey house and the Bear pit, is a new enclosure for birds, to be opened in the spring. Outside are cages not unlike those at the back of the Parrot house. Inside there are large cages on either side, like those frequented by the Birds of Paradise, etc., in the Insect house, and in the middle of the room, in three rows, are arranged smaller cages amounting to sixty-four. Some more smaller cages exist on the two narrow walls. The place is to be lighted by gas. A pity it is not electric light, as then perhaps Humming Birds might be induced to live with us.

Another alteration, which is at the same time a good improvement is under way, it is the enlargement forwards of the Kite aviary to about the same length as the original cages by the refreshment house.

In the Kestrel aviary a little farther on, past the small Mammal house, is an excellent specimen of the Greenland Falcon and a Peregrine Falcon caught in Cornwall, a bird not at all common in England.

Going now to the Crows' aviary can be seen the young Crested Screamers, which, although are not yet as big as their parents, have adopted the adult plumage, except the crest. In the same aviary is a white eye-browed Guan, a bird not often to be seen in the Gardens. With few exceptions the Guans are confined to the South American Continent and probably the word "Guan" is a local name.

Proceeding now to the Western aviary one will find a specimen of the Kagu, *Rhinochetus jubatus*, from New Caledonia. It is a rare bird, but the Gardens have been the possessor of one before, when Mr. Bartlett detected in it an affinity to *Eurypyge*, Sun-Bittern, which anatomical investigation proved to be correct, since the original describers regarded it first as a Heron and then as a Crane. Kagu is a native name.

It is rather a long-legged bird, slightly larger than an ordinary fowl. It walks quickly then suddenly halts and stares at you with its large eyes, and at the same time erects its crest. It is generally of a light slate colour, paler beneath, bright red bill and legs.

A Sun Bittern happens to be present in the same aviary, but except for being barred on its wings, and the coverts and tail being not unlike a Sun Bittern, there is practically no other resemblance.

A bird also worth noticing is the Double-striped Thicknee, *Œdicnemus bistriatus*. The Parrot house now contains the finest collection of small foreign finches that I have ever seen, and there are many varieties which are never to be seen at shows. To mention all these would take up too much space.

Ending with the Insect house, one would not fail to be struck with lovely specimens of rare birds to be seen. First must be mentioned the White-bellied Amethyst Starling from Gambia, presented by Dr. Hopkinson, and this is the first occasion when the Gardens have been able to boast of having a specimen. Its name is sufficient to describe the bird. In the glass cases Sugar-birds are to be seen, but what will please foreign bird lovers more than anything will be the fine collection of Tanagers, although by no means a complete one, as some of Mr. Townsend's well known varieties are not present. The Spotted Emerald Tanager is perhaps the best, a lovely specimen; then come three Tanagers, a Maroon, Striated, Palm, Blue-winged, All Green, Thick-billed, Violet and Dwarf Tanagers, all from Venezuela.

In the same house is a Poé Honeyeater, *Prosthermatodera novæ-hollandiæ*, or Parson-bird, so called from the two tufts of curled and filamentary white feathers hanging beneath its chin.

Poé or Poy-bird was given by Cook's people during the first voyage, who compared the bird's remarkable gular tufts to the earrings worn by Tahikans and called "Poies," as the word was then written. "Tuï" is a common appellation. The bird mimics well and makes a most peculiar sound, although it is stated to be a good songster. In the poster advertising the International Exhibition, to be held at Christchurch, is a figure of this bird.

Another rare bird is the Green Toucan from

Venezuela, a light green all over with a dark red bill.

Finally one should notice the Two-banded Courser from S. Africa, a bird allied to the Plovers, and an excellent albino specimen of the Spotted Flycatcher.

Further Additions to my Bird-room.

By Mrs. E. Warren Vernon.

In one of my last papers I said I had no soft bills in my collection. This is now no longer the case. I bought a lovely Blackcap first, he is very tame and flies about the room, taking mealworms freely from the hand. Am hoping he will commence singing soon. Following him I was given a pair of Whitethroats, but in such a state of raggedness. The hen had no tail and the wing coverts were tattered and torn. The cock has evidently had his beak bent when young, and it gives him the most foolish and vacant look imaginable, as he goes about with it half open. It in no way stops his feeding. They are the dirtiest, greediest birds I have, and am obliged to keep them with cocoa fibre in the bottom of their cage, their feet get in such a state.

Then at Xmas I was offered £5 worth of birds; all bird lovers will feel with me and know the delight of going to the docks to choose birds. I went to Hamlyn and found some nice birds. First I got an Indian Hill-Mynah (Lesser), a pair of lovely Liothrices. I have never seen such a lovely cock bird as this one was, and he sings like a Thrush. He is much larger and darker and has deep rich browny-gold feathers under his beak. I heard him sing in the shop and bought him at once, as once heard you can't forget the song. Then amongst a lot of Whydahs I saw one black one with a red collar. He had no tail, but now he is lovely. His tail is eight inches and still growing and his wings are turning their light-colour. He is a beautiful specimen of the *Penthetria ardens* or Red-collared Whydah. I could not obtain a hen.

I found a lovely pair of Cape Waxbills, they have joined the others in the big cage and are lively little things. A pair of Pin-tailed Nonpareils and a pair of Pin-tailed Whydahs finished my buy at the Docks.

I had seen a pair of Golden Orioles that had been in England since last March, and I went to see if one was still to be got. It was in a shocking state of plumage, having been kept in a wire netting cage and was very wild, but quite healthy, so I bought him. He is now growing a tail and I have removed his broken wing feathers, much to his disgust. He is quite tame and lets me catch him easily. I put him into a wooden Thrush cage and he loves the seclusion. Feeds greedily on banana and pear and mealworms from the hand ; I hope he will turn out a lovely bird soon. If any of our members have ever kept one of this species, I should be so glad if they could tell me something of it. I have not heard of anyone at present.

Then I got my great treasure, a pair of Golden-crested Wrens. They are perfect dears. I gave them a cage with cork hung up at the back and a tree to perch on. They are never still and are very greedy. I was grieved to find one dead, and her *post-mortem* showed that gluttony had been her undoing. I never dared let them out, as they hid in the curtains and were so fragile and tiny I feared to catch them in my net or hand. Flies alive they loved. The cock, who is alive and very gay, doesn't mourn his wife at all, but as it is not good for man to live alone I am going to get him another mate. They used to sleep in the most extraordinary way I have ever seen, with their tiny heads under or among each others wings and feathers. It was quite impossible to tell if it was one or two birds cuddled together in the highest perch in the cage. Have been very lucky with my birds except for one terrible catastrophe that happened the day before I was leaving home. When I went out to my aviary I found eight dead bodies. There did not seem to be any way for vermin to have got in, and the only conclusion I came to was that, either an Owl had clung to the sides and so terrified the birds they had dashed themselves to death, or it might have been a grey squirrel, as we are infested with these pests. Our neighbour, the Duke of Bedford turned down, I think 2,000, and now all the pretty little English red-coated squirrels are killed, all our wild birds' eggs are eaten, and they destroy all the trees, eat young birds and even rabbits.

Before the summer I hope to have put my new aviaries up. They will be in a warm, due south, walled in garden, where no wind ever comes, and I hope to do great things with a modicum of that wonderful thing called "luck."

A friend came back from Sierra Leone and brought me a Grey African Parrot and three Red and Green Love-birds. The former is very cross and swears in parrot language whenever I go near, except to feed him. I do not, I must confess, care for parrots much, but still I hope he will learn to talk in time.

Altogether I have fifty-four birds at present in cages; twenty cages to clean every day, and to-day came four lovely Tanagers,—another present—one Blue, one Olive, one Scarlet, and one Black. I will write of them another time, as I feel sure I shall bore my readers if I continue this paper any more now.

The National Bird Show.

Those interested in Foreign Birds, and wishing to see a fine collection, were certainly not disappointed at the 48th Crystal Palace Show, held from February 15th to 19th inclusive. A noticeable feature was the all round excellence of the exhibits, testifying to intelligence and care bestowed upon them; there being scarcely an ill conditioned bird among them. In all 109 entries were staged, and were divided among nine classes, three of which were for Lovebirds, Parrakeets, Parrots, etc., judged by Mr. T. T. Camps; the other classes falling to the lot of Mr. Swaysland owing to the enforced absence of Mr. Russell Humphrys.

First and foremost must be placed the Banksian Cockatoos; Mrs. Anningson's well known specimen (an adult female) taking first honours and five specials; Sir C. Lawes Wittewronge taking second with a unique pair of these birds, the adult male being an exceptionally fine bird, the female being rather rough. Their owner is to be congratulated on such a unique possession, and it is certainly to be hoped that he will make an attempt to breed them. As many were of the opinion that the male was a Funeral Cockatoo and not a Banksian at all, it may be of general interest to give the distinguishing features of the two species. The male Banksian is all black save for the red patch on underside of tail; the Funeral Cockatoo has yellowish ear coverts, and a band of the same colour across its tail.

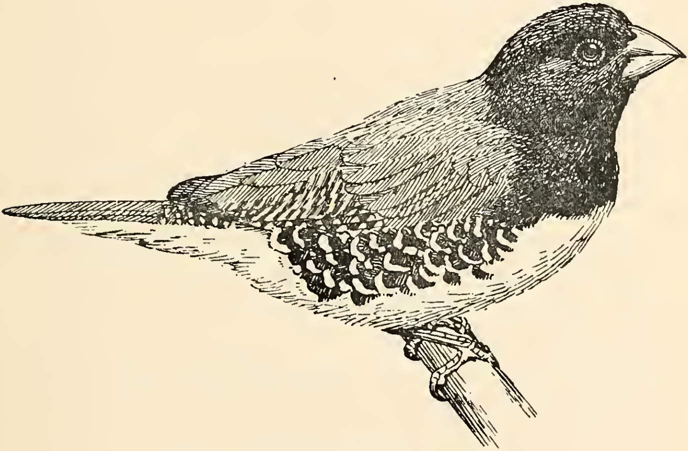
The class for Budgerigars, etc., does not call for comment, there being nothing out of the common. (1) Underwood, Yellow Budgerigars; (2) Wright, Red-faced Lovebird, male; (3) Leach, Green Budgerigars; (4) Howe, Yeo. Budgerigars; v.h.c. Peach-faced Lovebirds; c. Budgerigars. All in very fine condition.

Parrakeets, etc. (1) Pier, an exceptionally fine pair of rare Bourke's Parrakeets, one of the best marked and coloured pairs I have ever seen, easy first; (2) H. Cooper, very beautiful pair of Red-vented Blue Bonnets in the very finest plumage; (3) Miss Gordon, good Crimson-wing; (eq. 3) Mrs. Cooper, good Varied Lorikeet; (4) Frostick, nice pair of Lineolated Parrakeets; (eq. 4) Mrs. Cooper, very fine Barnard's Parrakeets; in my opinion this species must be numbered as one of the most beautiful of Parrakeets; v.h.c., h.c., and c., F. Howe, Hawkins, Nesbit, King, Blue Bonnet, and Crimson-wing Parrakeets in the order named. Also exhibited, a good pair of the lovely Tuï Parrakeet, and an absolutely rare and unique exhibit, Mr. Pier's Blue Banded Parrakeet (*Neophema venusta*), which is very similar to the Elegant, but greener; a very probable first appearance, and though a little rough, should have received a card at any rate. A very good specimen of the Black-headed Caique also shown, but had to be passed as wrong class.

Parrots, Cockatoos, etc.: also shown (3) Burrows, Red and Blue Macaw; (4) Merrington, good and well marked Grey; (eq. 4), Mrs. Cooper, good Senegal Parrot, richer in colour than when last shown; v.h.c. h.c., and c., Barrow, Mrs. Soddon and Cooper, Red and Blue Macaw, Red-sided Eclectus and Blue-fronted Amazon in order named. Very fine Port Lincolns and an immature Blossom-headed Parrakeet, shown in this class were rightly awarded w.c. cards.

Waxbills, Weavers, etc. This was one of the most pleasing features of the show; a really good array of so-called common (?) species being staged, and with one or two exceptions were all in very fine condition. I was glad to note that the majority were in fair sized cages and not confined for five days or so in cages which leave them hardly room to turn round. (1) Mrs. Vernon, Golden-breasted Waxbills, well shown making quite a pretty picture, as they made appreciative use of their shell nest; (2) Mrs. Cooper, White Java Sparrows, large and pure; (3, 4), F. Howe, Diamond Sparrow, quite one of the best I have seen. St. Helena Waxbills, a beautiful and tightly feathered pair of these exquisite birds. Also shown Grey Java Sparrows, Parson Finches, Avadavats, Tri-colour Mannikins, Bib Finches, and an abnormal Diamond Finch having the rump and upper tail coverts yellow. This class amply illustrated what a beautiful selection of birds may be kept without going outside the ranks of freely imported birds.

Grassfinches, etc.: Here Mr. Hawkins's lovely Violet-eared Waxbill was an easy first; for richness of colour, sleek and tight plumage it certainly has never been excelled. The same exhibitor's uncommon Vinaceous Fire Finches were second; truly a lovely chastely coloured pair (plumage having a lovely bloom) of this fascinating genus. The same gentleman's Red-faced Finches (*Zonogastris melba*) were fourth. (3) Beaty, a perfect specimen of the Black-headed Gouldians. Very hardly treated (v.h.c.) were Mr. Townsend's very rare Rufous-backed Mannikins, a first appearance* on the Show Bench and in perfect condition, should certainly have been third at least.



THE RUFOUS-BACKED MANNIKIN.
(*Spermestes nigriceps*).

Equally inexplicable appears the passing of a pair of Tri-coloured Finches (even though a little rough) without a card. Also exhibited very fine pair Lavender Finches (c.), Grey Waxbills, Cordon Bleus, Ruficauda, Pintail Nonpariels, and male specimens of Red-collared Whydah (h.c.) and Golden Sparrow.

Grosbeaks, Buntings, etc.: Mr. Hawkins was first and third with fine pairs of Cuba and the fast becoming common Quail Finches; these latter have quite the appearance of a miniature Quail and but seldom perch. Mr. Townsend's interesting and rare South African Rock Bunting (*Fringillaria tahapisi*) was second, and Mrs. Cooper's Black-headed Siskin was fourth; a good pair of this interesting species was without a card, the male was certainly not in full adult plumage, but both were sleek and tight in feathers; the female is very rare in this country, this being its first public appearance, and was certainly the first living specimen I had seen, she lacks the black head and flights of the male. Also shown Red-crested Cardinals, and a nice specimen of that old favourite the Virginian Grosbeak.

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* Since writing the above, I find these birds were exhibited both in 1894 and 1895, but have not appeared since that date.

Tanagers, Sugar Birds, etc.: For gorgeous tropical colouring this class always stands pre-eminent, and Mr. Townsend's Yellow-winged Sugar Bird and well-known Black-backed Tanager were first and second respectively, in spite of the first named not being so often seen as it ought to be, I should have reversed the position of these birds, because it has appeared several seasons on the Show Bench is no reason why the exquisite Black-backed Tanager should have its rarity and worth overlooked. (3) Mr. Dewhurst's rare Cuban or Banana Tanager, rather rough but an interesting and uncommon exhibit. (4) Mr. Harrison's Magpie Tanager, looking as well as ever, and hardly treated; this, though plainly clad for a Tanager in black and white, must yet be classed among the very handsome species of this gorgeous family; the contrasts are so chaste, its plumage so silken, and in a good light the purplish sheen so brilliant as to make it a handsome ellow indeed; while as it looked straight at you out of its fearless eyes it appeared every whit as wicked as a Magpie. The same gentleman also exhibited good specimens of the Blue and Archbishop Tanagers (*Tanagra episcopus* and *ornata*). A nice specimen of the Superb Tanager (figured in our last issue) belonging to Mr. Dewhurst completed this class, not quite so numerous as usual.

All Species not comprised in the above: A fine class containing several interesting and uncommon exhibits. Deservedly first were Mr. Harrison's exquisite Silver-eared Mesias, which space forbids any other description than that of a "glorified" Liothrix. It is now some years since my esteemed friend Mr. E. W. Harper first imported these birds, and it is regrettable that only two or three odd specimens have leaked through since; it would well pay dealers to look after this grand and interesting species. Mr. Burrows's Green-crested Touraco and Green-billed Toucan were second and third respectively. (4) Mr. Townsend's rare Glossy Starling (*Calornis metallica*), an interesting bird which has always received hard treatment at the hands of judges, should have been higher. Also shown Coley or Mouse Bird, interesting but unattractive exhibit. Japanese Tits, very interesting, exhibiting the well known Tit acrobatic characteristics; though not shown before living specimens have been well known to aviculturists for years. Other beautiful and interesting exhibits were a White-throated Ground-Thrush, Ceylon House-Mynah and Siamese Hill Mynah, a rare Ruddy-shouldered Cowbird and Gold-crowned Troupial (very rare); there is a specimen of the last named in the

Western Aviary at the Zoo., that simply crawls over you when in his enclosure: most of the Hang-nests readily become tame when treated individually. A couple of Melanistic Pekin Robins completes an interesting class.

The last Class was for Foreign Hybrids which only drew an entry of seven. Mr. Hawkins's lovely Red-mantled Parrakeet (Pennant × Rosella), of special interest, being a wild caught hybrid; its colours were very rich and pure, and must be numbered as one of the handsomest birds in the Show. The same gentleman's Bicheno × Zebra Finch (v.h.c.) was a trim and pretty little bird with the plumage of both parents well defined. Mr. Seth-Smith's plainly clad and wild, but interesting, Song Sparrow Hybrids (*Z. leucophrys* × *pileata*) were very like female Bramblefinches in appearance. The same owner's handsome Long-tailed × Masked Grassfinch was h.c., again both parents were pretty equally brought out. Mrs. Cooper's well known Red Rump × Rosella was third, and her Alario × —? was fourth; this latter was evidently an Alario × Canary, and though a well conditioned bird should have been w.c. Also shown a reputed Zebra Finch × Indian Silverbill, but which was merely a male Combasson.

At the Show one heard disparaging comparisons between the Foreign Bird Section and Canary Sections, etc. It must be noted that the F. B. Section at the Palace by no means represents the interest taken in foreign bird keeping. The growing and commendable custom of keeping foreign birds in large aviaries* is responsible for the non-increase and possible decrease in the entries of foreign birds for the various Shows; few aviculturists caring to go to the trouble of catching and steadying birds for the show bench, and that at a time mostly when aviaries are being overhauled and everything being put in order for the coming breeding season. W. T. P.

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* The very probable true reason is that rarieties are better catered for than the commoner varieties which are owned by the greatest number of bird-lovers.—H. G.

The Club medals were awarded as under:

Mr. W. L. Hawkins, silver medal.
Mr. S. M. Townsend, bronze medal.
Miss Conway Gordon ,, ,, (for member never having won one before).

The Gouldian Finch.

[The following interesting field notes and methods of capture of this beautiful and interesting inmate of our aviaries are from an interesting booklet issued by Messrs. PAYNE AND WALLACE, the Australian Bird and Animal trappers].

The Gouldian is purely a tropical bird, and is rarely found farther South than Latitude 18°. It has, however, a very wide range, extending from the North-East of Queensland to the North-West Coast of Western Australia. It is rather more plentiful in the latter part which are its favourite haunts.

The Black-headed Gouldian is undoubtedly the most plentiful of the three varieties. For instance, taking on an average, for every 100 Gouldians we take from the nets, 80 per cent. are Blackheads, 15 per cent. Redhead cocks, and only 5 per cent. Redhead hens. It will be clearly seen that Redhead hens are in the minority. Now the ten Redhead cocks have to find mates somewhere, and as there are so few Redhead hens, they have nothing else to do but to pair up with the Blackheads, and this is what they do. In pairing up in this manner it seems of little or no consequence whether it be a Redhead cock and Blackhead hen, or *vice-versa*. Their young are always true, either Redheads or Blackheads. We have seen many cases where they have been mixed, perhaps there have been two Redheads and three Blackheads.

We have many times caught the adults of the two varieties, together with their brood, and in most cases the young were of both kinds. We very seldom come across a pair of Redheads though. The only possible way to find out these facts is by handling them in large quantities as we do.

They do not make an elaborate nest as some suppose, in fact, in their native state, they do it rather in a slovenly fashion. On one occasion when Mr. Payne was riding through the bush, he saw a Gouldian fly out from a low iron bark tree. Upon pulling down the branch, from where it had flown out, it snapped off. In this branch there was a small hole, which acted as an inlet to the interior of the branch, inside of which was a Gouldian's nest with four eggs. This is an instance of how they will crawl into any hole and lay their eggs. We could quote scores of similar cases ; in fact we have known them build their nest in the whim of an old shaft of a disused mine.

* * *

A BIRD TRAPPING EXPEDITION IN NORTHERN QUEENSLAND.

We left Townsville, a seaport situated in Northern Queensland, for a trip overland to the Gulf of Carpentaria, to see if we could find something new in the way of birds. This was in the nineties. On the route we were taking we should find no natives, as they are dying out fast, except, perhaps a few stragglers here and there, so we could not get the natives to come with us. On this account we had to go alone. At this period we both took our share in the trapping. Our turnout consisted of a new wagon, three draft horses, saddle horse, half-ton of seed, and roll of half-inch mesh wire netting, two cwt. flour, seventy-lbs. sugar, five-lbs. tea, fourteen-lbs. tobacco, rice, bully, jams, tinned milk, fish and meat, medicine chest, and many other things too numerous to mention, which altogether weighed about a ton. We also had with us breech-loading guns, Winchester rifle, revolvers, and plenty of ammunition; these articles are indispensable in the Australian Bush. After loading up we started out on a Saturday afternoon, and needless to say we did not get very far that day. We drew up about five miles out from Townsville and camped on the Banks of the Boley River. The one which is riding the saddle horse goes on ahead to find a suitable place for camping. By the time he has made a fire and other preparations the wagon is generally on the scene. The horses are then taken out, unharnessed, and taken to the water, hobbled, and bells put on, then they are right for the night. We now attend to our own wants, and make tea and sit down to our last meal of the day. At this time we have some baker's bread, probably the last we shall see for three months. This being our first night out we have our meal in silence, except for the tinkle of the horses' bells and the cry of the "Maupauk" (the Great Night Jar). This is a bird of the owl family. It has a head somewhat resembling that of a frog, and makes a croaking sort of noise. After supper we think of bed, and having no bed or pillows with us, mother earth has to be our bed, and our boots, covered over with coat, our pillow. We have with us a waterproof which is about two yards square. This is laid out on the ground and our rug or blanket is doubled and put over it. We lay on the underside of the blanket and cover ourselves over with the upper part.

The sky is one sea of stars with the Southern Cross well overhead. This is not a very nice spot for camping, as the district is well known for the number of black snakes that are in the vicinity. We are up early, for one cannot sleep with the noise of all the birds chattering, and the thrilling cry of the Cucka Burra, as the natives call it, or Laughing Jackass. One of us goes to look for the horses, as they are not tied up, and sometimes they are nowhere to be seen. We have known them wander away for about five miles, but they generally leave some track to show which way they have gone. After they are found and harnessed, breakfast is partaken of, and then we shift on again. Our next stage takes us sixteen miles before we come to any water, so we have to take some with us in a canvas bag, holding three gallons, which is hung on the back of the wagon. During this stage we have to climb a 1,200 ft. range. We find it very slow work getting along. It is not a wooden-block road we can assure you. Upon reaching the top of the range, after an arduous climb, we stop for dinner. The horses are taken out and left to graze for about an hour after their hard work. There being no water we have to start on our three gallons, with which we have to be very sparing, as this has to last us for another ten miles.

Dinner being over we harness up and get going. The roads are now much easier to get over and we do not stop until we reach our next stage, which is Larkin's Water Holes. Here we find a few Mountain Magpies, some Mealy Rosellas, and one or two Crimson-winged Parrots. The White Hawk is found in this district; it is a lovely bird, pure white, yellow legs, and orange-coloured eyes. We have on several occasions shot this bird, but have never been successful in catching it alive, as they are very scarce.

The horses are once again attended to and then we prepare for supper, but before we can have the last meal of the day we have to make some bread. It may be of interest to give our way of making bread. One of us makes a "damper," as the Bushmen call it, or dough, in the following way: about 4 or 5 lbs. flour, one tablespoonful cream of tartar, one teaspoonful carbonate of soda, and the same quantity of salt; this is then mixed into a stiff dough. During this time the other has been preparing a big fire, The dough is then placed in a tin dish and put in front of the fire. When the fire has practically burnt itself to nothing but a glowing red mass of charcoal, a hole is made in the centre, into which the dough is put, and the red-hot ashes heaped all over it. It is then left for about half-an-hour, when the rising of the bread causes all the embers to crack. We then rake it out of the fire and with a bunch of grass beat off all the cinders and ashes that are clinging to it, and then we have our bush-made bread. This making will last us about two days when we have to make some more. After this we have supper and a smoke, and then "to rest."

Our next camping place will be more interesting. It is the self-same place where Leichardt's ill-fated exploring party camped in the forties. This spot is situate on the banks of the Burdekin River and is fifteen miles from our last camp. There is a very large gum tree here on which Leichardt cut his initial letter **L** into the trunk. There is plenty of game and fish here, also grass for the horses, so we camp here for two days to give the horses a rest. During this time we have a bathe in the river and wash our clothes. We have been sitting on the banks of the river, fishing when the Platypus would slowly glide to the surface and have a look at us. After its curiosity was satisfied it would glide out of sight again. They are very cautious and the least movement will cause them to retire altogether. If not disturbed it will continually put in an appearance. It is a curious animal, a sort of small beaver with a duck's head. Its enemy is the Eagle Hawk. This bird will wait for it to make an appearance near the surface, and will then swoop down and pick it out of the water and away with it. Whilst we were at this spot we saw a pair of Bleeding Heart Doves, but were not successful in catching any. It was the first time we had seen them in Queensland. We were under the impression that they were found in New Guinea only, but as it is no great distance across the Straits, there is no doubt they had flown over. No doubt they do this occasionally.

When the two days are up we start off again. This goes on from day to day, and we are afraid it would be testing the patience of the reader too much if we gave our daily travels throughout the trip.

* * *

HOW WE CATCH THE BIRDS.

We start from the Depot with the usual equipment (as mentioned in another part) and make a journey to the nearest water hole. One man is left at the Depot to prepare for the birds that are brought back to him. On finding a suitable water hole, possibly 50 miles from our starting place, we dig a trench from the banks of the water, and let the water run into this. Our nets are then set one each side of the trench, and the natives are stationed all round the water to frighten the birds off as they come to drink, which, by the way, is in the early morning and again in the afternoon. They soon find out however that they can get an undisturbed drink at one place in the trench, and there a number of them go. They are driven off several times until they come in larger numbers. When a sufficient number has come to drink the line is pulled, and the nets come over like the leaves of a book and the birds are underneath. Of course, the man who is manipulating the net line is concealed, about 25 or 30 yards away. Sometimes we work two nets, one each end of the water. At times the water is so large that it would take 300 or 400 natives to surround it, and as this is out of the question we stake the water round with paper flags. If there is the least bit of wind these flags flutter about, and so frighten the birds off. In trapping birds we have a lot of trouble with hawks. Sometimes they are so daring that they will actually try to take the birds from the nets.

We have caught as many as 274 birds in one net, and with one pull of the line. Birds were very plentiful that morning. On that occasion we filled no less than ten cages (or 1200 birds) in three hours. This will open the eyes of bird trappers in England.

No doubt the reader will think that the birds ought to be cheaper when caught in numbers like this, but bear in mind what an expedition like this costs, the risks and privations that have to be borne. When in this district we can only work till ten o'clock in the morning and after four o'clock in the afternoon. Between these hours it might be 115° *in the shade.* This will give you an idea of what the heat is like. We have known it so hot that the lagoons have dried up, and perhaps we have about two gallons of water left to last us 50 miles. It is very hard times when there is no water to be obtained, and perhaps the food runs short. On one occasion we lived on kangaroo flesh for three months, and often have we had to get water to drink from a lagoon wherein lies a dead kangaroo or dingo. The mosquitoes and flies are great tormentors, and to protect our eyes we have to wear goggles. But it is terrible to see the horses, they can do nothing to protect themselves. This is during the day time. At night we have to put up with the squalls of the water fowl, night birds, and worst of all, the ants.

Our trapping operations take place soon after the breeding season, and quite 75 per cent. of our captures are uncoloured, or, in other words, have only their nest feathers, and when in this condition they look a miserable lot of birds. All these are moulted off in the cages, and by the time we arrive in Europe they are in perfect feather.

Notes on the Wild Life of the inhabitants of our Aviaries.

I must say at the beginning that these notes will only be possible by a constant reference to the pages of the "Journal of the Bombay Natural History Society," "Bird Lore," etc., and are compiled from actual field notes.—Ed.

Avadavat, *Sporæginthus amandava.* This, known on the spot as the Indian Red Munia, is an inhabitant of almost all our aviaries. By their vivacity, cheerful little song, which is almost continuously uttered, their general hardiness, and almost always changing and brilliant plumage, they have made themselves universal favourites.

Captain Betham found them in the Dekhan, quite a colony of them along the banks of the river, among the coarse rank grass, growing in thick tussocks from 3ft. to 4ft. high; this was early September and the males were in full bridal costume. Two unfinished nests were found of the usual type, carefully built domed structures, with a small entrance hole on one side; constructed of coarse grass lined with finer, feathers and flowering grasses; and from 2ft. to 3ft. from the ground in the aforementioned grass tussocks. There were some twenty pairs in this colony, only two nests were found, which the females alone were seen to build. The definite number of eggs in clutch is not stated, but when one of the aforementioned unfinished nest were visited after a week's interval, three eggs were found in one (two were taken) of the usual white colour about ·52 x ·42. The males kept up a continual low song very pleasing to the ear. *Journal of the Bombay Nat. Hist. Soc.*

Editorial.

WINTERING FOREIGN BIRDS OUT-OF-DOORS

My birds have all flourished in spite of biting East winds, frosts, fogs, &c., all of which go to make up a London winter. I may say my avairy is simply a piece of my garden netted in, having a floor area of about 300 square feet, 40 of which is roofed in to form an open-fronted lean-to shed, the remainder is open both at the top and front. Its aspect is South. It contains about 70 birds consisting of species from almost every clime, and my only loss since September has been a cock Harlequin Quail who died by violence. The Grassfinches, which include Gouldians, Longtails and Rufoustails, are looking particularly well, and most species, including Avadavats and Waxbills, have lived under the above conditions varying from four to eight years, six years being the average period. The foregoing results are not based upon isolated instances, data from isolated specimens not being included in above records.

HOW BIRDS BATHE: These few remarks are not intended to be in any sense complete, but are quoted at random in the hope that they will call forth others from our members. I may say my bath is a large-sized glazed sink, sunk to ground level, with stones placed in same to provide suitable depths for all the birds inhabiting my aviary. The Liothrix are very eager for their bath, they plunge in at one end and run through to the other, and under water if there is sufficient depth, repeating this operation till they are saturated. Most species of the Thrush tribe and Cardinals simply get into the deepest part and splash the water all over themselves, taking a very thorough bath; very few of these will permit another of similar size to bathe at the same time, but will tolerate small birds. Most of the Grassfinches, Sparrows, Buntings, Mannikins, and Waxbills bathe in similar fashion. The Gouldian is a very dainty bather, choosing a part where its legs and thighs are just covered, and by dipping and jerking the head splashes itself all over, getting its plumage fairly saturated before leaving off. The Doves, speaking of Greenwings and Diamonds, do not splash about much seeming to be content to sit in the water for a time with the back above the surface, the head is jerked under a few times, and a little water sprinkled over their backs. The Cockatiels get thoroughly into the water but don't splash about much, but will sit in the water sometimes for fully ten minutes. The Rosellas act similarly but finish with a good splash. One of the prettiest sights in this respect, is that of the Budgerigars taking their tub. Last summer my aviary was over grown with rape, fully 8in. to 10in. high by July, and it was a sight long to be remembered to watch the way they disported themselves among the wet herbage, after a shower or while it was wet with the morning dew. The abandon with which they throw themselves about and roll over and over, must be seen to be appreciated, and certainly will not be soon forgotten by the writer. In very dry weather an artificial shower was provided for them, from the rose of a water-can. In hot weather, if given a fresh supply of water, most of the birds enumerated above tub, morning, noon, and again at dusk. Members will be surprised what a lot of bird character is revealed while taking the bath, and it will repay observation.

Correspondence.

SIR,—I should like to thank Dr. Creswell for all he has done for the Foreign Bird Club, and I am sure this is the feeling entertained by all the other members.

No one can appreciate the difficulty and time spent doing *post mortems* except a medical man, therefore I feel justified and feel that it is the least I can do, to thank Dr. Creswell most heartily for, not only this, but also for his editorial work and heaps of other ways in which he has brought up the magazine to its present state of efficiency.

In closing, I would like to wish Mr. Wesley Page every success, which I feel sure he will gain, and to thank him for taking on the editorial work. JAMES MCDONAGH.

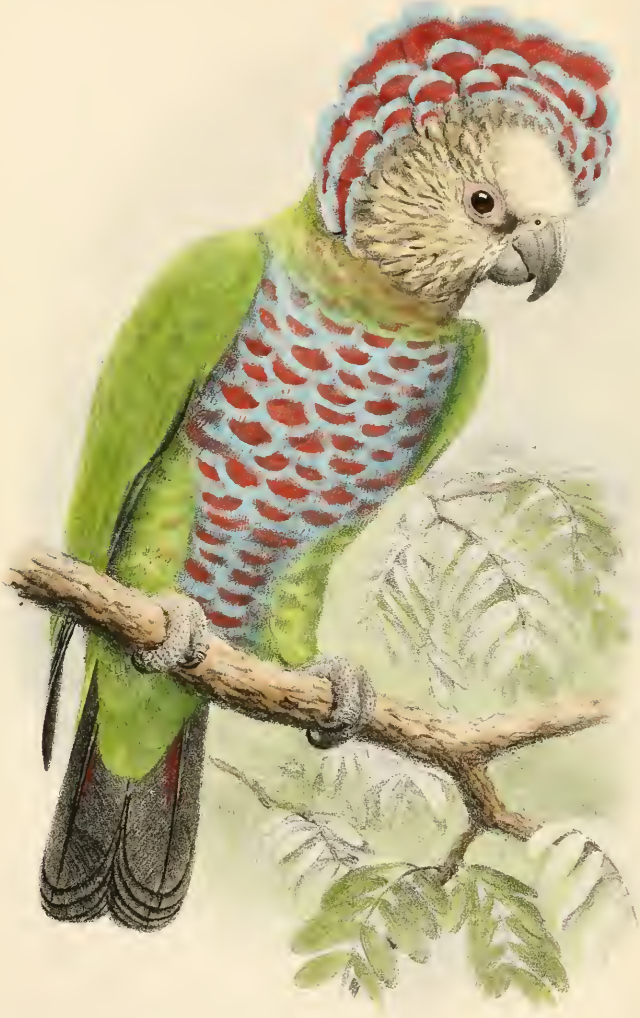
Post Mortem Reports.

(*Vide Rules*).

MALE CROSSBILL (Mr. Mark Cronstein). The cause of death was hæmorrhage right side of skull probably due to an injury.

CANARY (Miss Gordon). The cause of death was due to inflammation of both lungs, and congestion and enlargement of liver.

H. GRAY, M.R.C.V.S.



H. Goodchild del, et lith.

Huth imp.

HAWK-HEADED CAIQUE.

Deroptyus accipitrinus.

From a living specimen in Mr. W.T. Page's collection.

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[APRIL, 1907.

BIRD NOTES:
THE JOURNAL OF
THE FOREIGN BIRD CLUB.

The Hawk-headed Caique.

(Deroptyus accipitrinus).

By Wesley T. Page, F.Z.S.

This singular, droll, intelligent, and interesting Parrot inhabits the Brazils and Honduras, where, judging by the numbers that leak through to this country, it cannot be at all common. The bird whose portrait adorns this issue was placed on deposit at the Zoo (July 1906) by my esteemed friend and fellow aviculturist Mr. E. W. Harper, from whom I purchased it the following October. Their scarcity in British Guiana is well illustrated by the fact that he has been there about three years and only succeeded in obtaining two, one of which unfortunately escaped, the other forms the subject of our coloured plate. Very little is known as to their wild life; Mr. Harper informs me that they seem to be only procurable from the aborigines in the interior.

Plumage: Adult male. Head, with the exception of the crown, brown; the crown is creamy-buff, and the feathers of the sides of the face have shaft streaks of the same colour, but slightly darker; the ruff or long feathers of the nape, breast and abdomen deep red, each feather being edged with opaline-blue; entire back, upper tail coverts and wings, rich grass-green; the bastard wing, primaries and coverts, black;

secondaries, green tipped with blue-black ; tail feathers with the exception of the two outer ones on each side, green, bluish at the tips; the extreme outer feathers are black, with a portion of their outer webs edged with blue ; the next feather on each side has its inner webs black and its outer ones green ; underside of tail feathers black with the lateral feathers splashed with red at the base of inner webs; iris, brown, (my bird is only in its second year and possibly not yet fully mature), said to vary from brown to rich yellow, this is probably sexual ; beak, dusky-horn colour, lighter on the culmen and edges of the mandibles ; legs and feet, blackish-grey. Total length 14″, tail 6·3″.

Adult female. As to this I can only give secondary information. Count Salvadori thinks the female lacks the red areas at the base of the lateral tail feathers ; it would appear as if he were correct as the bird figured in Greene's "Parrots in Captivity" was afterwards ascertained to be a female; the said figure has the underside of tail entirely black, and I cannot think the artist would have overlooked this, the colouring being quite distinct, and not at all obscured. The late Dr. Greene had an undoubted male later, which he describes as having the head, face, and pointed nuchal feathers creamy white; also that his female was smaller, and had the same portions of her plumage duller and grayer than those of the male; it would therefore appear as if these distinctions were fairly accurate, and that the accompanying figure is that of the male. In confirmation of this I may say my bird favours the ladies, which is quite usual with parrots of all species of the male sex.

Before leaving the description of plumage, I must point out that this varies considerably according to the position as to light from which the bird is viewed. When the light shines upon its back, the plumage appears a rich, shining grass-green; reverse this position and the green portion of its plumage appears to be overlaid with bronzy-gold. Again, in the full light, the red and blue of nape and underparts are very bright and beautiful, and also very sharply defined—vary the positions and these appear at one time almost all red, at another blue appears to predominate, and yet again these portions have a purplish appearance. I may say that the beak of my bird has become darker since it has been in my possession, so that it is quite probable that when fully mature it will be blackish-horn, or perhaps blackish in colour. Whichever of the conditions or variations, according to position, under which the bird is viewed, it has a beautiful and striking appearance.

This majestic bird has the power of not merely raising the feathers of the crown, but can control the whole of the feathers of the head and neck in this respect to a greater or lesser degree, as will be seen by reference to coloured figure; but it is in respect of the lovely feathers of the nape and sides of neck that this is most remarkable, for they are not merely erected perpendicularly, but so that they lean forward at a fairly sharp angle; the movement could not be more striking if each feather had a joint beneath the skin; the feathers are raised simultaneously, but yet when watched each feather appears to pivot itself upwards and forwards individually. The feathers of the head and sides of face are only slightly raised, not fully to a horizontal position, it is better described as being shaken out and separated one from the other and partially extended upwards. The erection of the ruff takes place either when the bird is excited, or when the back of its neck is rubbed, and at such times the wings are slightly raised and the plumage of the underparts shaken loose; on such occasions the beautiful markings and colours of the underparts are fully brought out, the spangling being very clear. I find I have omitted to say earlier that across the red and blue plumage of the chest there is a wash of yellowish green, forming a slight band across the chest. When the feathers are extended and the ruff erected (as seen in plate) it imparts to him quite a fierce as well as a magnificent appearance.

Dr. Butler in "Foreign Bird Keeping" quoting Schomburgh, says: "That it is less abundant than "the typical parrots; it lives chiefly in pairs, more "rarely in little companies, affects the lower woods in "the vicinity of settlements, is confiding, easily tame-"able, but delicate and unteachable. Its cry sounds "like Hia-Hia (the English equivalent would be Hea-"Hea); it moreover nests in tree-holes, and lays more "than two eggs, occasionally four." As regards the above I can only say that it is neither delicate, nor yet unteachable, in fact just the opposite, for I consider it robust, and certainly to be numbered among the most intelligent of parrots. The late Dr. Russ considered this species as far and away one of the most beautiful and interesting of parrots; from the same source we learn that it is only singly and rarely imported. The Hon. and Rev. F. G. Dutton considers the bird treacherous and inclined to bite. The Hon. and Rev. Dutton must have been unfortunate in his specimen,

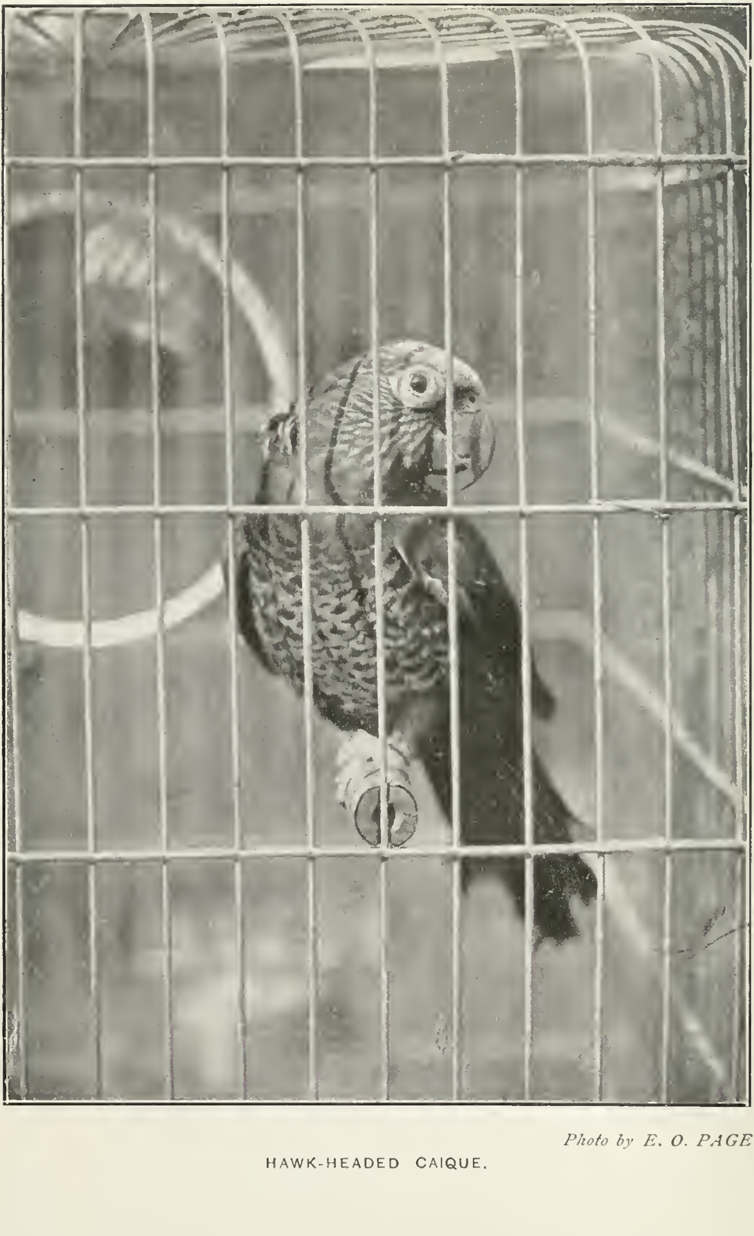

Photo by E. O. PAGE.

HAWK-HEADED CAIQUE.

at the same time it proves that cantankerous and malicious individuals occur in this species; my own experience coincides with that of Drs. Greene and Russ; but it will be seen later that it is not perfect. To my mind, however, it is the parrot for a pet.

Attractive qualities:—These are numerous, quite apart from its beauty and interesting manner of raising the feathers of the nape. It is nothing less than a libel to describe this bird as delicate and unteachable, it is quite the reverse. My specimen would have nothing to do with constant repetition, but has picked up such phrases as the following: "Ernest"—"Ernie"—"Ernest's here"—"Ernest's come"—"What's the matter"—"What yer doing?"—"Whatever are you doing?"—and others which it does not yet articulate clearly. *

When he wishes to come out of his cage, he comes to the front and makes quite a noise with his mandibles against the wires of cage, and calls out "open the door." It is only noisy when left alone for a time, and then it calls out loudly to attract attention; fortunately even this noise (which is going on as I write this) is neither a discordant screech nor yet unmusical; and its screams, for the above cannot be counted as such, are of the same character, they are not often indulged in, and an entire lack of harshness robs them of their terror. My bird is quite a talented whistler and imitates at times the Thrush with marvellous fidelity, and is responsive to passers-by in the road; a boy whistling as he passes wakes him up at once and he nearly always responds and practically in the same key.

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* This bird was photographed while talking: the attitude is very characteristic.

Unfortunately he often declines to display his talents before strangers.

It is also an accomplished acrobat, the way it throws itself about in its cage (22 inches sq. by 30 inches high), hanging from one foot is both interesting and little short of marvellous. And again it is amusing to see him grip his perch with his feet and twirl round like a boy on the horizontal bar, and then turn and look at you with an expression that is equivalent to—"What do you think of that?"

Another of its droll habits is to whine like an infant in trouble, and when he was being carried home from the Zoo (in a closed box) he was responsible both in the train and roadway for many glances round by his indulging in this drollery; the sound is most realistic.

He is very tame, and delights in coming out of his cage (though when he came in my possession in November last he did not speak a word, nor yet show any evidence of knowing how to use his wings) for a good fly round, and to be nursed, cuddled and tickled. He will lie for an hour or more in one's lap while gentle friction is applied to his person, purring with intense satisfaction the whole of the time. When he has had a fly round it is amusing to notice him when he settles on the table (whether cloth is on or not), he will bend forward and rest his upper mandible on the table, and with wings slightly raised and tail outspread will run round the table sometimes several times without lifting his beak therefrom. While taking exercise he will alight either on the uplifted hand, or shoulder and fly from one to the other, frequently he will ignore the hand and alight on the head instead; I may say the ladies (though they count him rare fun), most decidedly object to be so crowned.

He is also fearless, and very fond of his own way (*very human this*), and when checked he most decidedly resents being interfered with, and would certainly protest with his mandibles if permitted. Anyone he objects to "he goes for," just as a bull dog would, and just as fearless, but no harm is done providing hands are kept out of the way; he will follow such an one round the room, frequently charging, and worrying trousers or skirts as a terrier would a rat. At such times I am bound to admit that if the individual concerned were to be so careless as to let him lay hold, it would need a surgeon's stitches to repair the damage.

It has one rather objectionable habit when specially pleased and with anyone he approves of, he will try to feed them by bringing up the half-digested food from his crop; however if the one concerned permits him to lay hold of their finger (he never even pinches on such occasions), he immediately reswallows same; but occasionally he is so energetic that it is thrown out. This habit is common to many other species of Parrots, but it is very pronounced in this species.

I fear I have already wearied my readers and must bring this long and somewhat rambling account to a close.

Diet: He gets a mixture of canary, millet, rice in the husk, wheat, dari, hemp, and sunflower; and has for variety—for "afternoon tea"—a piece of dry toast, also at intervals ripe fruit as in season, nuts, and green food, the latter is seldom eaten. He is very fond of cuttlefish, and soon demolishes a good sized piece. He is a frequent but not a large drinker, taking a few sips after each meal. It is rather amusing to watch him with his toast, after he has eaten two or three pieces, dry as given, with the next he will descend from his perch with it in his mouth, go to the water-vessel and dip it in three or four times, then climb to his perch and quickly eat same apparently with great satisfaction.

It is also called the Ruffed Parrot. Its native name is Hia-Hia, which resembles its call-note.

Nesting Notes for 1906.

By W. E. TESCHEMAKER, B.A.

Our Editor having asked me, with very short notice, to contribute some notes on this subject; I have looked through my note-book of last season to see if I can find anything of sufficient interest. I am afraid that this will be a record, for the most part, of failures, as I have already written elsewhere about such small successes as fell to my lot in 1906, so it will be unnecessary to refer to the latter again.

Generally speaking, it is quite easy to write about failures, for every season produces a large crop of them. I have often wondered why this particular hobby should be so barren of results considering the amount of energy and expenditure devoted to it. Perhaps one reason is that we most of us live at such high pressure, in this twentieth century, that we are not able to give the continuous care and attention to it, that is necessary for success.

Another difficulty, which those of us who live in the country have to contend with, is getting suitable birds. If anything rare reaches the London dealers it is snapped up at once, for there is a certain cult which makes a practice of going the round of the London bird shops, picking up bargains.

Lastly, we have in the country to wage continual warfare with weasels, hawks and owls,* in addition to the cats, rats † and mice which all aviaries suffer from. I think if anyone, living near London, had leisure and inclination to give his whole time to his hobby, he would do great things in that branch of aviculture which consists in breeding rare birds.

However, I am digressing.

The winter and early spring of 1906 were, on the whole, cold and stormy. Something seems to have gone wrong with the South Devon climate these last two winters. Frosts used to be a rarity, and for weeks together we used to have delightfully warm and genial weather. However, despite the night-frosts and gales of wind, several species began to nest in January. Golden-breasted Waxbills made several attempts but did not succeed in rearing any young, being so much persecuted by larger birds. This seems to be quite a hardy little species, ‡ and it is much to be regretted that it is not more frequently imported. The two young I bred in 1905 are still alive and vigorous. I believe that Lady Dunleath was the first to breed this species in 1903 in Ireland.

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* Double wire netting, with a few inches between each course, would prevent losses from this source. Ed.

† Danysz Virus keeps both rats and mice in check. Ed.

‡ These have lived out of doors all the year round in my aviary. The average length of life of many pairs has been from four to nine years. Ed.

My old pair of Firefinches laid in a nest-box (see plate) at the end of January, but some mysterious epidemic made its appearance among the Australian finches and the cock Firefinch, which has been two years in an outdoor aviary, succumbed to it. This species is a favourite of mine but, for all that, I sincerely wish it were not imported, as it is far too delicate to stand the long voyage, and quite ninety per cent. are lost. This same pair of birds hatched two young in February 1905 and reared them quite successfully.

A pair of Grey Singing-finches brought off three young in February (see plate). This species is so combative, that I have never succeeded in rearing any young where more than one pair have been kept together. The males in the breeding season fight so furiously, that they sometimes fall to the ground locked together, and can be picked up by hand.

It is pretty to see the parents catching flies for the young which they take most skilfully on the wing. Altogether this one pair brought off eight young last season, but the latter were all killed, except two, by Tawny Owls. If alarmed, the young have a fatal habit of clinging to the wire netting, where they fall an easy prey. This season I have replaced my Grey Singing-finches by their near relations—the Yellow-rumped Singing-finches, which latter I have just succeeded in breeding. *Serinus angolensis* is undoubtedly the best songster of all the African Serins and a very charming and hardy little bird.

At the end of February I had quite a chorus of song from a cock Blackcap, a Black Lark, and two Woodlarks. The Black Lark is an excellent songster.

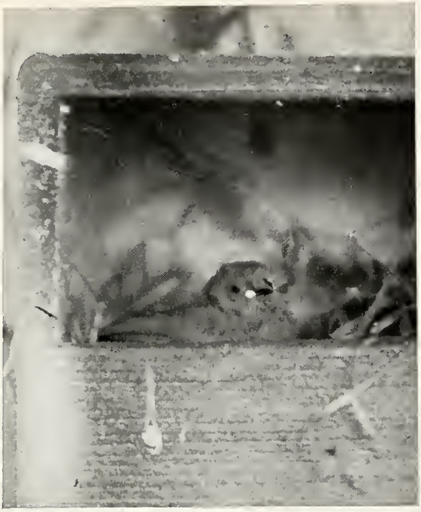

Photo by W. E. TESCHEMAKER.

YOUNG FIRE FINCH IN NEST.

YOUNG VIRGINIAN CARDINAL IN NEST.

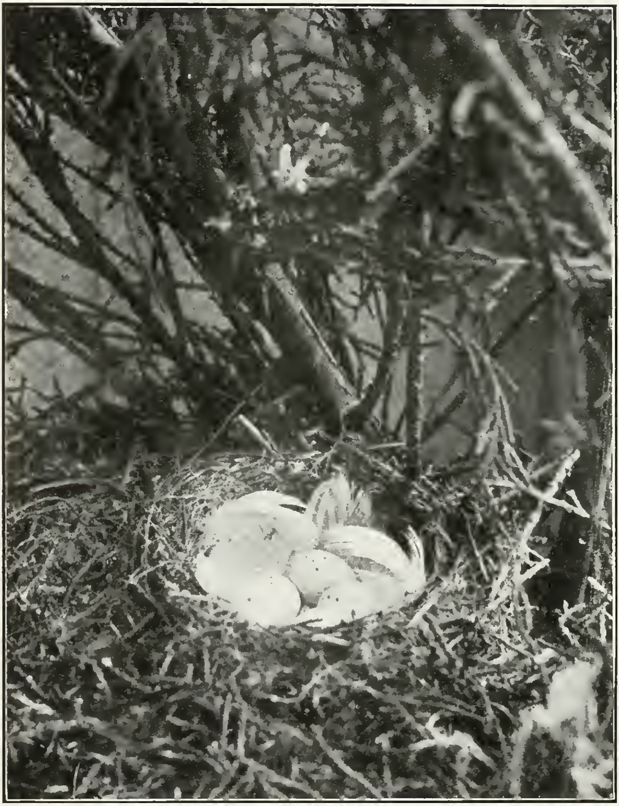

Photo by W. E. TESCHEMAKER.

NEST AND EGGS OF GREY SINGING FINCH.

He has some lark-like trills but, for the most part, his song consists of loud and clear warbling. I think this species should be pinioned, as I lost both my males from injuries to the head, sustained in flying up against the netting. Three Black Larks have been shot in this country this winter, so I suppose this will now rank as an English species. If a few were turned down in the spring, I firmly believe they would establish themselves here.

Nothing has a better effect in an aviary than the music of the Woodlark, and the bird seems to thrive perfectly until the moult when, as far as my experience goes, the majority die. For this reason I now always pick up one or two in the autumn and release them the following June.

On the last day of March a pair of Hedge-Sparrows laid their first egg. I had eggs laid on the ground in 1904, and a nest built (but no eggs laid) in 1905. However, last year they had a better chance, for two Chingolo Song-Sparrows, having selected the adjoining bush for a nest-site, I enclosed the two pairs of birds with some herring-netting. The Accentors were much pleased with the arrangement and reared one youngster, but the Chingolos at once deserted their nest.

Some time since a correspondent of "Canary and Cage Bird Life" gave a circumstantial account of the hatching of some Hedge-Sparrow's eggs and the rearing of the young by a hen Canary. Dr. Butler has stated that he sees nothing impossible in this achievement and, needless to say, I defer to his very excellent opinion in the matter. At the same time I must say that, after seeing my old hen Accentor feeding her young, and the laborious and absolutely futile attempts of sundry hen Canaries to rear young of various semi-insectivorous species (such as Chaffinches and Cirl Buntings) for me, I find it hard to credit it.

I transferred the Chingolos to a smaller aviary to give them a better chance.

Green Avadavats nested in the middle of April, again rearing three young as in 1905. The young have no stripes for the first two months: the stripes then appear a few at a time, and generally on one side of the breast before the other. In this intermediate plumage the young pass the winter, without further change; in the following spring they come into full adult plumage.

My old pair of Virginians were turned out by themselves in a breeding pen (about 12 feet long by 8 feet high by 4½ feet deep) so that they might be sure of getting enough insect food for the young. In 1905 they brought off three nests, and three young in each nest, but only three young survived the moult owing, as I thought, to insufficient live food. However, in the breeding pen they did not do so well. In the first place they squabbled a good deal and, secondly, they did not seem to be able to find a suitable site for the nest. Finally the hen scraped a hollow in the ground (surely an unique site for a Cardinal!), and there hatched one youngster. As one would expect, it did not thrive in such a situation, and quickly died of cramp. I then put in an old Blackbird's nest for them, on which foundation they built a superstructure and hatched several more young, but only one survived (see plate). I have not been able to get any results from breeding pens as yet, but am trying them

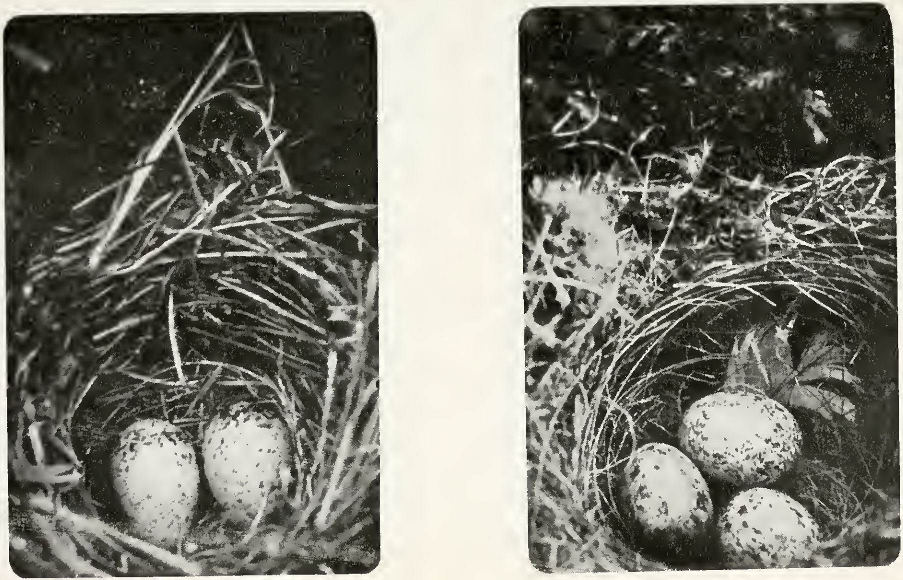

Photo by W. E. TESCHEMAKER.

EGGS AND NESTS OF CHINGOLO SPARROW.

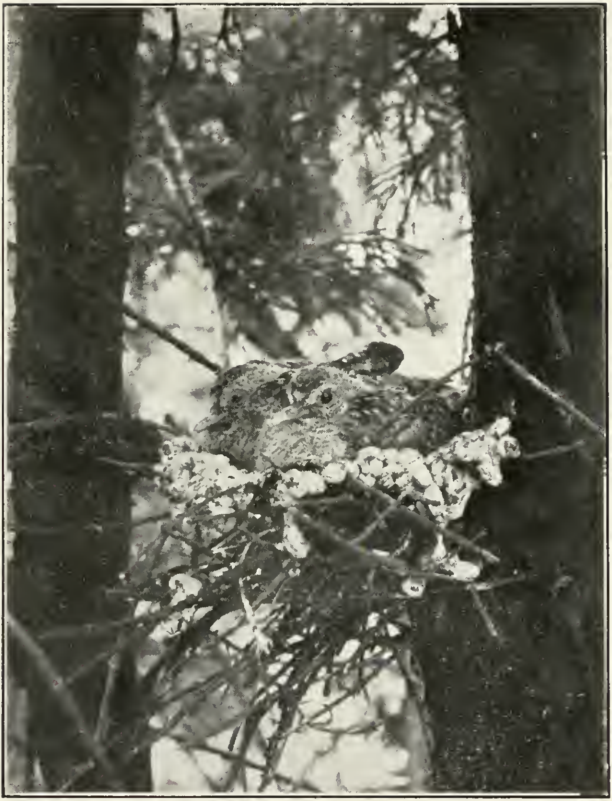

Photo by W. E. TESCHEMAKER.

YOUNG DIAMOND DOVES IN NEST.

once more this season. If Virginians could be easily reared they would be quite a profitable speculation, for some imported this spring have been advertised at 72/6 per pair. Although I have tried various methods with them, I cannot claim to have solved the problem. The best method, however, is, I think, to place the young the very day they leave the nest in a warm box-cage, with bars wide enough apart to allow of the parents feeding them, and let them remain there a month. Then bring them indoors and give plenty of mealworms, until they are well on seed.

The chief difficulties with this species are that the young leave the nest insufficiently feathered, so that a very little rain or cold kills them; and further that, although they grow well, they have no constitution.

My Diamond Doves were nesting continuously throughout April, May, and June, and never failed to rear all they hatched (see plate). Doves are not favourites of mine, but this species is so graceful and dainty and easy to breed that it can be recommended to anyone. I removed the male bird once, as an experiment, but the hen brought up the young without the least difficulty. The nest is so exceedingly small that, as soon as the young are a week old they completely fill it, leaving no room whatever for their parent, so the latter is compelled to stand on a branch outside the nest and covers them with much apparent inconvenience. Although aviary-bred Diamond Doves do not sell very well, still they are one of the very few species that may be considered profitable to keep. I have parted with mine now, and find that I quite miss their mellow call-note and the charming display of the male.

Several of the Australian finches brought off broods in April and May, but I have not space to say anything about them here, and I have written about two of these species elsewhere. It is sad to relate that the majority of these young finches, although they seemed so vigorous all the summer, died in the moult. Perhaps matters might have gone a little better had I been at home at that time, but I fear the Australians suffer from the same disability as other aviary-bred species—namely, no constitutions.

Two pairs of Tree-Sparrows nested in May, and were successful at the second attempt. This bird is generally overlooked or mistaken for the House-Sparrow. As a matter of fact, though quite unlike when seen side by side, they are not easily distinguished at a little distance until one notices the conspicuous round black cheek-patch of the Tree-Sparrow. I have found colonies in various places—one in a thick hedge in an old garden in the Isle of Man, another in a woodstack in Norfolk, and a third in Sand-Martins' holes at Wroxham railway station. The question was recently asked in a certain weekly publication whether Sparrows sang? I have never heard the House-Sparrow sing, but the Tree-Sparrow has a most peculiar song, composed of Sparrow-like chirps intermingled with loud and clear warbling. I released three of the adults in July, and two of them remained in the neighbourhood and could be seen any morning on the top of the aviary until the middle of February in this year, when they disappeared. This season I am trying to cross the Tree-Sparrow with the House-Sparrow.

A pair of Sulphury Seedeaters laid and sat several times, but not one egg hatched. The eggs were blue with black spots, very like a Canary's.

At the end of June a cock Blackcap, which had passed three years in the aviary and never molested any other inmate, suddenly seemed to take leave of his senses. He had two young hens with him, which I caught in my garden in September, 1905, and one of these he began to attack in the most furious manner. In a few days he killed this hen outright and then began to construct a nest in a low privet bush, in conjunction with the other hen. The nest was one of the frailest structures I ever saw, resembling the frame work of a nest just commenced.

Unfortunately the Chingolos (which I had removed to the same division of the aviary) selected the same time for nesting again, and the most furious conflicts took place. As I had set my heart on breeding the Chingolos I removed the cock Blackcap. The hen sat very steadily on three eggs and I thought it quite possible that she might rear the young single-handed if well supplied with insect food. The day after she hatched I went out, soon after daybreak, to see how matters were progressing. A glance was sufficient to show me that success was not to be mine. The bird absolutely refused to feed with any insects I supplied and was busily engaged in searching every leaf. As soon as she found anything she took it at once to the young birds ; in the meantime the young were getting completely chilled. In two days they were all dead. *

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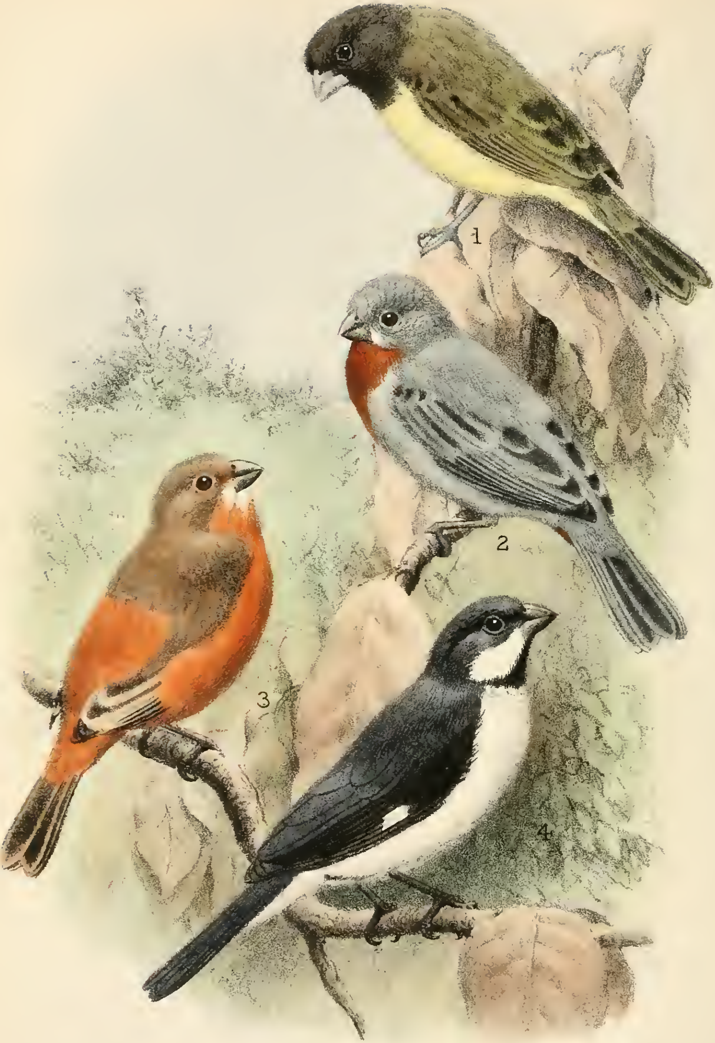
* If sprays of foliage infested with green fly and other bugs had been stuck in the ground, and also in the bushes near at hand, they would possibly have been reared. Maggots and smooth caterpillars, small beetles etc., scattered over the foliage would also have helped towards a successful result. Ed.

The Chingolos, having got rid of their chief enemy, the cock Blackcap, soon completed a very neat well-built nest and laid three eggs. Dr. Butler describes the eggs as "pale blue with dull brown spots," but I expect the eggs of this species vary a good deal, as I have examined eggs of two different types and neither answered to the above description, having a white or cream-coloured ground.

The Chingolos sat well for nearly three weeks and then another nest made its appearance within a few inches of the first with two eggs—and one Chingolo sat in each (see plates). So all my trouble had been expended in an attempt to breed from two hens!

I will conclude with a few words about a pair of Cordons. For two years I had been trying to obtain a sound cock Cordon. Hen Cordons are generally supposed to be the most delicate, but the reverse has been my experience. At length I succeeded, and the result was the most beautiful little nest (the smallest I ever saw of any dome-shaped nests) and three white eggs. It was a proud day for the Cordons when they led forth a young family of two, and later in the summer they again produced twins but, alas! all four perished during my absence from home in September. Probably the early autumnal frosts were too much for them.

May I say a word about the importation of Cordons? When we have such a large selection of species that really do well in captivity, it seems to me quite unjustifiable to import such a frail little bird as this, only a very small fraction of each consignment surviving the voyage and change of climate. Now, we have the matter in our own hands: if we do not



Goodchild del. et lith.

Huth imp.

1. GUTTURAL FINCH.
Spermophila gutturalis

2. LAVENDER-BACKED FINCH.
S. castaneiventris.

3. FIRE-RED FINCH.
S. minuta.

4. BLACK-HEADED LINED FINCH.
S. ocellata.

From Life.

buy them most assuredly the dealers will not import them.

I hope all members of the Foreign Bird Club will agree with me that Cordons, Lavenders, Fire finches and Pintail Nonpareils are not fit subjects for aviculture, and will do their very best to stop the importation of them.

Tanagers.

(*Tanagridæ.*)

By Mrs. E. Warren Vernon.

So much has already been written on these lovely birds, by all the best authorities that I feel I am attempting something I had better leave alone, but the parable of the mouse helping the lion gives me courage to try, in the hope that some of my observations on such species as I have in my possession may be of help to others.

The Superb Tanager (*Calliste fastuosa*) is without doubt the most gay, sprightly, and certainly tamest of the lot. He lets me pick him up at any time, and flies down to get flies or mealworms from my hand. His manner of taking them is quite peculiar—in fact no other bird takes food from my hand in the same gentle *lingering* manner, as if he wished to show what confidence he has in me. At present I am obliged to keep all my birds indoors in cages, as I am moving to a larger house, where I am hoping to keep all my Tanagers out of doors. His cage is not large, because he flies about the room all day. He prefers orange to anything, but eats always most of his banana: scft-food he cares very little for.

His song, which he sings sitting on a high picture frame, is quite pretty, though sometimes rather as if he had a sore throat, but his funniest tricks are in front of a looking glass. He sits on a clock singing to his own reflection and then suddenly a jealous mood appears and he flies up hitting at himself with his beak and screaming what I conclude is meant for vile abuse. He is, I regret to say, not over fond of a bath, though my Goldcrest always sets a good example, but two or three times a week he indulges in a real wash. In eating mealworms, he chews them so that all the inside is squeezed out and then swallows the skin that is left, so as to obtain all the taste possible. Very amiable towards all lesser birds, allowing them to enter his cage and eat his food.

SCARLET TANAGER (*Rhamphocœlus brasilius*).

What a difference between this bird and the Superb! Quiet, shy, rather wild though very lovely, he is really only a picture. He has no pretty ways and he is very dirty, though he bathes every day. He will, when let out retire to a high corner and sit there till hunger drives him back to his cage. He prefers banana and adores mealworms, is very gentle also with other birds. [Many individuals are very pugnacious in a mixed series and need watching.—ED.] So far he has not sung; though for his glorious plumage I would always desire to keep him, still his attractive qualities are not great.

BLUE TANAGER (*Tanagra episcopus*).

He is to my mind one of the loveliest Tanagers and not very common. The exquisite soft blue-grey of its body plumage, with turquoise wings is perfect. He is a very gentle and quiet bird, not wild like the

Scarlet. He is not greedy but hardly eats any soft mixture, only banana and orange. He does not care as much for mealworms as the others. [Many individuals will eat as many as you choose to give.—Ed.] He bathes seldom. He keeps himself in exquisite plumage, spends most of the day thinking, if I let him out he promptly goes into some one else's cage and thinks there. [In a moderate sized aviary this species seldom becomes tame, and I am of opinion that Mrs. Vernon's bird must be a female, for my male has quite a sustained song, most of the notes being piercingly high.—Ed.]

Olive Tanager.

This bird is the clown among Tanagers. He is horribly greedy, very dirty and most pugnacious to all others of his kind; I have seen him having a disagreement with my Shâma, it was really quite amusing, the Tanager only sat back on his tail and the Shâma* jumped up in the air and struck at him with his feet but nothing happened. He eats all day or would if I allowed it. Bathes very well, but digs his beak so deep into the banana that I have had to clean his nostrils which were quite closed up with the soft fruit. I notice all these birds do very little, comparatively speaking, preening of their plumage.

I consider the last three about on a par for lazy, sleepy amiability. Very likely when I put them out into a big aviary they will change all that.

It is curious the Superb being the only one to sing, though the Olive gives a short sharp cry sometimes, especially when trying to hurt some other bird.

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* The Shâma was probably the aggressor.—Ed.

The new Bird House at the Zoological Gardens.

By H. Goodchild, M.B.O.U.

Those of our readers who know the Zoological Gardens and have looked forward to the opening of the new Bird House, will be interested to know that this is an accomplished fact. At the time of writing about three parts of the cages and aviaries are filled with birds, probably by the time these lines appear the remainder will be occupied also.

The new house, which is situated between the Monkey House and the Bear Pit, is not so well lighted as the Parrot House, either as a whole or in respect of any of the rows of cages. It is about 80 feet long and is lighted by three long windows in the roof, and others at the ends. A noticeable feature is that gas brackets have been put up, this being the only place in the Gardens where provision is made against the shortness of our winter days or the dire consequences of fog.

Two double sets of cages occupy the centre of the house, these being arranged in recession, so that each tier gets a share of the top light. Each set consists of three tiers of cages. Cages also occupy each end of the building, the top row of which are at present empty.

Along the sides are capacious divisions or aviaries, each suitable for several birds of the size of Mynahs or Toucans, while outside the house are some well arranged flights, which at present are devoted to members of the Crow tribe.

Most of the birds at present in the new house are finches, and these seem to have been collected from the Parrot House and Western Aviary and placed together so that, though not in so good a light as formerly, one can study them to far greater advantage as regards detail. Entering by the doors nearest to the Monkey House the visitor would find on the left a fine series of Hangnests, including the Golden Hangnest (*Icterus xanthornis*), Golden-crowned (*I. chrysocephalus*) and the Brazilian (*I. jamaicai*); the genus *Cassicus* is represented by the Yellow (*C. percicus*), and the Red-rumped Troupial (*C. hæmorrhous*), also the Bare-faced Hangnest (*Gymnomystax melanicterus*).

The largest divisions on the left side of the house are tenanted by a fine series of Aracaris, which are seen to much more advantage than in the cages in which they are more generally kept; they apparently enjoy their semi-liberty and young trees to disport about on.

The central sets of cages contain a good series of the genus *Spermophila*, previously exhibited in the Parrot House. A little further on are a nice series of Cardinals, Green, Red-crested and Virginian; close by is a fine specimen of the beautiful American Blue Bird. Several species of Sparrows are placed together, including the Fox Sparrow (*Passerella*), the Yellow (*P. luteus*) which was figured in *Bird Notes*, (Vol. III., the Rock (*Petronia*), the Grey-headed, the Pileated Song, and the Manimbe Sparrows. A fine series of Munias are exhibited, and also a good series of Firefinches, including the Vinaceous (*Lagonosticta vinacea*) (which was also figured in Vol. III. of *Bird Notes*), *brunniceps*, *rufopicta*, and *senegale*. Amongst the Waxbills one notices the exquisite Blue-breasted

(*Estrelda angolensis*), the Green, Orange-cheeked, Red-bellied (St. Helena) and Orange-breasted Waxbills. Four rather sorry looking specimens of the Quail Finch occupy one of the cages of the lowest tier, and when I saw them they had not the piece of turf to sit on they used to have in the Parrot House. Citron and Saffron Finches are both represented, as also the Grey-necked Serin and the Grey Singing Finch. Several hybrids between well known British cage birds are placed in the new house, and I was glad to see them relegated to the top story of the set.

The Finches most interesting to a lover of British birds would probably be the Palæarctic series, the Teydean Chaffinch (*Fringilla teydea*), the Rosy Bullfinch (*Erythrospiza githaginea*) and the Siberian Rosefinch (*Carpodacus erythrinus*). Amongst those most interesting to a lover of foreign birds may be mentioned the Blue Grosbeak (*Guiraca cærulea*), the Rose-breasted Grosbeak (*Hedymeles lisdoviciana*) and the beautiful little Parrot Finch (*Erythrura psittacea*).

The cages at the farther end contain, besides an interesting example of the Green Jerdon's Bulbul (*Chloropsis jerdonï*), specimens of the Bengal Gold-vented Bulbul, the Orange-vented, White-cheeked, and the Red-eared Bulbuls. These all seem to feel the change, from being at comparative liberty in the Western Aviary, to being confined in narrow quarters and dull light, for they are as yet rather wild.

The large enclosures on the S.W. side are tenanted by several species of Mynahs, two Jungle Babblers (*Crateropus*), several Pekin Robins (the latter being in poor feather), and the Great Saltator (*Saltator magnus*).

The outside cages contain a Chough, Jackdaws, Jays, Magpies, Rooks, an Australian Crow, Pied Crow Shrike, and last but not least, a very cheerful specimen of the White-backed Piping Crow.

When the House is filled and the inmates have grown accustomed to their new quarters, it will be worth a journey to Regent's Park to see. I hope it will be as successful as it deserves to be.

[Ill health has prevented my visiting the Gardens for eight weeks or more; when last there cages and aviaries were practically completed, and from what I saw then I am very pessimistic as to the result—the cages are too small for permanent homes,—provide practically no seclusion for their inmates, and owing to their arrangement, the occupants of the lower tiers will, I fear, get badly scared while the upper ones are being examined. It certainly seemed to me, that too much had been sacrificed in providing for mere numbers, and I certainly hope aviculturists will not copy them in this respect. At the same time I hope the house (after modification I fear), will prove a success, and that time will prove my fears to be largely groundless. I must however say, that on the occasion of my visit I felt there was nothing to admire at all but mahogany and varnish.—Ed.]

Notes on the Wild Life of the Inhabitants of our Aviaries.

[Being compilations and quotations from the Field Notes of various Natural History Journals, etc., of the countries to which the respective birds are indigenous.—Ed.]

The Great Hornbill (*Dichoceros bicornis*). Not common but found on the mountain ranges of Travancore. In captivity it is fearless and can hold its own with most dogs. It will eat rats readily. Having killed a rat the bird passes it across and back between its mandibles, and when it is thus sufficiently elongated and soft, it tosses it up and swallows it at one gulp. The casque is not formed until nearly a year after the bird is hatched.

Breeds in the holes of large forest trees, at a height of from 30—50 feet, returning year after year to the same tree. It seems pretty well ascertained that the female plasters herself up in the nest when she begins to incubate, and remains there till the young one is hatched, depending on the male all the time for food. During this time single birds only are seen. In the beginning of March I was fortunate enough to obtain an egg; it was of a very rough texture, and was no doubt originally white, but when I got it the egg was stained quite brown.

(FERGUISON & BOURDILLON. Journal of Bombay N.H.S.)

* * *

NESTING OF HORNBILLS. It is well known that the Hornbills build their nests in hollows and holes, high up in forest trees, and that the male, when the hen is ready to sit, walls her up. He keeps her supplied with food till the young are ready to leave the nest. The reasons for this curious habit has always been a mystery, to which, however, I think I have obtained a clue.

I ascertained some time ago that the common Grey Hornbill (*Meniceros bicornis*) moulted the whole of the quill feathers of her wings and tail during the period of incubation. It appears that if this be the general habit, the female would be unable to fly, and would fall an easy prey to any predatory bird or beast which happened to discover her. This, it strikes me, must be the reason why the hen Hornbill is thus protected and concealed by the male bird.

(W. OSBORN, Lt.-General. Journal Bombay N.H.S.)

[It appears fairly conclusive that the hen practically boxes herself up in nest hole, but that in some, if not all, instances she receives some assistance from the male.—ED.]

* * *

THE GOULDIAN FINCH. Further reference to Messrs. Payne and Wallace's interesting booklet reveals the following interesting details. Specially interesting, as confirming the deductions which some aviculturists have made from the demeanour of these birds in the aviary. It is quite conclusive that there is only one species: the three so-called species being merely varieties of the same species. Messrs. Payne and Wallace very seldom came across a pair of Red-heads (vide last issue). They will not breed in a small cage, but will do so in an aviary with plenty of flying room. The best nesting receptacle is a hollow stump or limb of a tree; it should contain a number of holes large enough for the Gouldian to deposit its eggs. "They cannot stand draught. They can stand a good "amount of cold, but it is imperative that they be kept from "all draught. They are not soft as many think, but very 'hardy, providing they are looked after and kept in a proper "manner." [My Gouldians seem to me to be the most cheery of all my birds during vile weather.—ED.] For diet they recommend canary and millet, hay seed (sweepings of a hay loft), green food, such as grass in flower and French lettuce; plenty of flint grit and clear water, also rock-salt and cuttle-fish bone. Further comment would be superfluous, reference back to past articles in *Bird Notes* for comparison should be both interesting and instructive.

* * *

THE INDIAN WHITE-EYE (*Zosterops palpebrosa*). This is one of the commonest birds on the Hills of Travancore from 1000 feet upwards, but more especially at high elevations. I have never met with it in the low country. They go about in small parties and keep up a continuous twitter as they search the leaves for food, assuming all sorts of attitudes as they creep among the branches and cling in any position. The building season is April and May, and the nest is found at all heights from the ground. One I took at 4000 feet elevation was on the side of a cutting in the road. It is found throughout the range.

(FERGUSON. Journal of Bombay Nat. History Socy).

* * *

THE MAGPIE ROBIN (*Copsychus saularis*). One of these birds found its way one morning into our drawing-room, and in the course of its wanderings alighted on the writing table which has at the back a small mirror let into the framework. When the bird—a male—saw its own reflection the first impulse was evidently anger, for he dashed his beak against the glass and scolded in an unmistakable voice. Then he moved away, but presently returned, and now was all sweetness: he posed before the glass and courted his reflection with a little ripple of soft song. At intervals he peeped round the back, and seeing nothing took a flight round the room only to return and re-commence courting.

Almost every day he pays us a visit: he flies direct to the table, and walking up to the mirror pays court to himself with undulations of body and the same little ripple of song. This has now being going on for a week. Is this admiration or is it courtship?

E. C. CHOLMONDELEY. Journal of Bombay N.H.S.)

(*To be continued*).

Editorial.

BLACK COCKATOOS: The following, reprinted from "Canary and Cage Bird Life," evidently upsets most of the sexual descriptions of these birds; in fact "Genera Avium," now publishing, figures *C. banksi* as black, washed in parts with bluish and brownish.

"There are six varieties of these birds, of which I have " kept five—that is to say all but the Macara Black. I prefer " to call these by the names that I have myself given them, " because the Zoological names have no point.

"The Macara Black is so-called by me because it has the " the skin of the cheeks bare of feathers. This skin, by the " way, changes in colour in the same manner as the wattles of " a turkey cock.

"Then there is the Banksian, the Yellow-tailed Black, the " White Tail, the Green Black, and the little Garganey. A " pecularity of the Banksian is their extreme range of size— " from that of a Jackdaw to the size of a small Eagle. These " apparent varieties are in appearance identical, though they " differ in size and in their cry.

"The pair at the show was the Large-billed Banksian, so " distinguished by naturalists, and the male cries 'Karrak,' or " or rather 'Kar-r-rak,' which is the native name for the bird. " The other varieties give a squeal or smooth cry. The bird " belonging to Mrs. Anningson that deservedly got the first " prize was under consideration by me some years ago as a " mate for my hen, but I made up my mind at the time that it " was not a Large-bill, and hearing its cry the other day con- " firmed my opinion. My male is still quite a chicken, and has " not yet cast his short and shabby nest feathers. When " immature the male and female have a similar plumage, which

" the male retains throughout life, becoming, however, much " more brilliant at maturity. The female changes completely " at five or six years old, losing her speckles and barred tail, " and turning black with a broad band of vermillion across the " tail, this band again disappears in old age, the old bird " becoming completely black. She lays eggs in captivity."—CHARLES LAWES-WITTEWRONGE. *

[From the above, it appears that the usual order of things is reversed, and that the young of this species (*C. banksi*) wear the male plumage while immature.]

Salvadori, Cat. Birds, Vol. xx., page 110,—Gives the description of the female (*C. banksi*) as differing from that of the male as follows :—" Head and upper wing-coverts spotted " with yellow ; under surface crossed by narrow irregular bars " pale yellow, which become yellowish red on the under tail-" coverts; the red part of the tail interrupted by numerous " and irregular black bars, and passing into yellowish-red " underneath and into sulphur yellow on the inner margins of " the feathers."

* * *

EARLY NESTING NOTES, etc.: After being confined indoors for six weeks, the initial glance of my birds was an event of great interest. I was surprised to find that, in spite of frost, cold east winds, etc., which had filled the major portion of this period, that the Madagascar Weavers were almost in full colour, and that most of the other species I possess were well advanced thereto. I was also surprised to find a young Indian Silverbill on the wing, which had evidently been out of the nest three or four days, and was flying strongly. The number of records of these common birds having bred in captivity is still small, so that at present it must be accounted a shy breeder in our aviaries. Experiences as to its hardiness are very variable ; our member Mr. Teschemaker, who bred them last year, found them if not exactly delicate, at any rate short lived.

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* Later, I learn Sir Charles Lawes-Whittewronge's hen has not laid in captivity. It is to be hoped that the earliest opportunily will be taken of testing the sexes by anatomical examination ; my remarks are based on the assumption that Sir Charles Lawes-Whittewronge's observations are correct ED.

My present pair reared me one young bird last season, all three have been out of doors all the winter, and that they are in the best of health, is evidenced by the fact of a young bird having been reared so early in the season. From a private letter I learn that Mr. Teschemaker's Blackcaps and Plovers laid their first eggs on April 5th and 6th respectively. As will be seen from his interesting article in this issue, this member has already succeeded in breeding the Yellow-rumped Serin (*Serinus angolensis*), this being, I believe, the first time they have been bred in this country.

* * *

"BIRD LIFE OF THE BORDERS": This well known work by Mr. Abel Chapman has been out of print for some years. It has now been largely re-written and has a number of additional illustrations. Messrs. Gurney and Jackson have it in the press, and it will, we understand, be published by the time these notes appear. Brimful of interest, it should be in the library of every student of bird life.

* * *

THE BOARD OF AGRICULTURE have published a new edition of their leafiet on the Black Currant Mite, giving full details as to the eradication of this pest. It will be sent post free on application, and letters, addressed as under, need not be stamped. The Secretary, Board of Agriculture and Fisheries, 4, Whitehall Place, London, S.W.

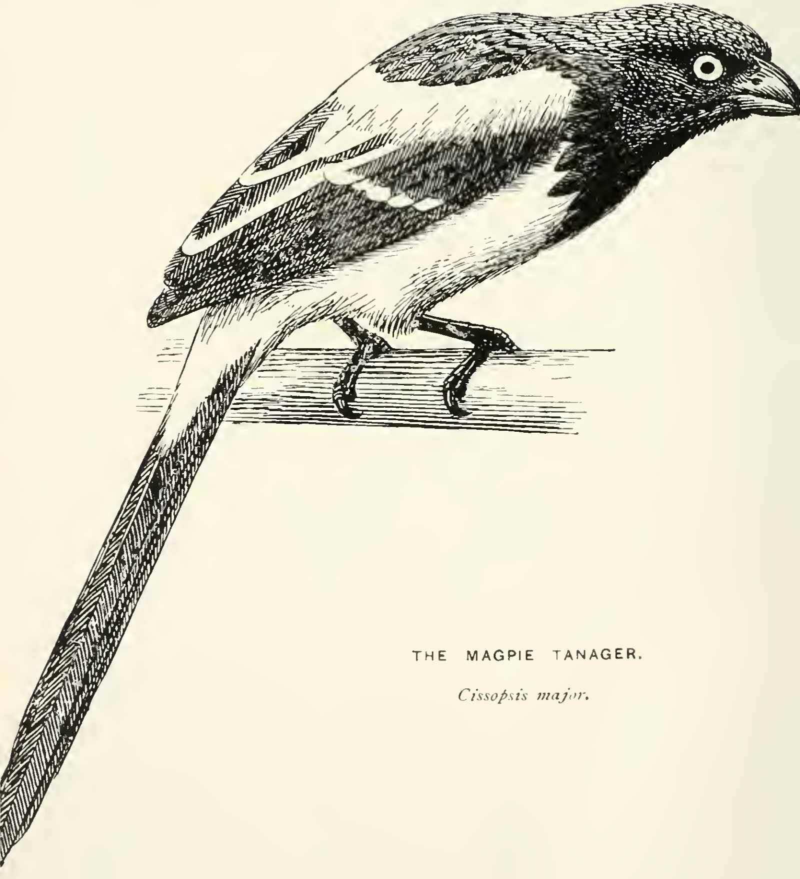
Post Mortem Reports.

(*Vide Rules*).

Diamond Sparrow (Miss M. Gibbons). The cause of death was due to congestion of the right lung.

Hen Canary (Dr. George Master). The cause of death was due to heart failure in consequence of the excessive fatty condition of the whole body. The shell of the egg in the oviduct was soft and therefore not quite mature. Stop hemp and inga seed. I find canary and German summer rape quite sufficient for caged Canaries.

H. Gray, M.R.C.V.S.



THE MAGPIE TANAGER.

Cissopsis major.

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BIRD NOTES:

THE JOURNAL OF

THE FOREIGN BIRD CLUB.

The Genus Spermophila.

By WESLEY T. PAGE, F.Z.S.

This interesting genus belongs to the family FRINGILLIDÆ, and consists of thirty-six species, most of which are fair songsters, some being of more than average merit in this respect. They are of fine contour, chastely and prettily clad: while not sombre there are no really brightly clad members of the genus. Their range as a whole is from Texas throughout Central and practically the whole of South America. The species are as follows:

1 *albigularis*
2 *hypoleuca*
3 *grisea*
4 *plumbea*
    whiteleyana sub sp. A
    columbiana ,, B
5 *superciliaris*
6 *simplex*
7 *obscura*
8 *paupea*
9 *telasco*
10 *iornata*
11 *homochroa*
12 *analis*
13 *analoides*
14 *castaneiventris*
15 *minuta*
16 *hypoxantha*
17 *palustris*
18 *nigroaurantia*
19 *nigrorufa*
20 *pileata*
21 *cucullata*
    potionata, sub sp. A
22 *melanocephala*
23 *torqueola*
24 *albitorquis*
25 *ophthalmica*
26 *lineata*
27 *moreleti*
28 *parva*
29 *cœrulescens*
30 *gutteralis*
31 *ocellata*
32 *lineola*
    trinitatis, sub sp. A
    amazonica ,, B
33 *aurita*
34 *luctuosa*
35 *corrina*
36 *bicolor*

(Brit. Museum Cat. of Birds, Vol. XII.).

It is my purpose in this paper to give a sufficient description of all the above to enable readers to identify rare species (this is only possible by constantly quoting from the B. M. Cat. of Birds, Vol. XII.).

Descriptions etc. will be given in the order of the above list, excepting those species figuring on the plate illustrating this article, which will be placed first. Three of these, viz. *minuta*, *castaneiventris*, and *ocellata*, were first imported to this country by my esteemed friend and fellow-aviculturist Mr. E. W. Harper, F.Z.S., M.B.O.U., and presented by him to the Zoological Society of London, in July 1906.

Diet: This is very simple, but the more it is varied the better, of course providing only wholesome food is offered. Their staple diet when not breeding is millet and canary seed. As regards millet, all the varieties should be given, viz. white, brown, and spray; also grass in flower (i. e. grass in the ear), and other green food; most of the species appreciate and should have a few insects, such as mealworms, smooth caterpillars, beetles, spiders, and green fly (aphidæ) from rose and fruit trees. When they have young to feed soft food should be given, dry if they will so eat it, if not it must be made crumbly moist. I may say that a supply of the mixture given below is always in my aviary, and I find nearly all species of finches take a little.

Soft food mixture: Ants' cocoons (best procurable), dried flies, crushed Osborne biscuits, and dried pupæ in equal parts.

Before leaving the matter of treatment, I feel that I ought to deprecate the somewhat common practice of sifting the excreta and rubbish from the sand and then using it over again; this is a most insanitary practice and very poor economy. The sand absorbs the moist portion of the excreta, and no matter how carefully the sifting is done, a portion of the sand is contaminated with the birds' excreta, the moisture from which it has absorbed—it would be waste of good space to enlarge upon this, and I hope my readers will cease such an insanitary practice.

THE LAVENDER-BACKED FINCH.

14. *S. castaneiventris.* Fig. 2 on plate.

An interesting and pretty species, with a sweet little song, of which there are four at present on view in the new Bird House* at the Zoo. I am not aware of any having reached the hands of private aviculturists, but I am hoping in a few weeks to become the happy possessor of some of the rare species figuring on the coloured plate. So far opportunity has been given only for studying this species in a cage, and amid the uncongenial environment of the Parrot House; but I am of the opinion that this species would be simply superb disporting themselves amid the greenery of an outdoor aviary. Mr. Goodchild's fine drawing of this figure is most characteristic of the species.

Adult male: The general colour of the upper surface is blue-grey, which is also the colour of the lesser wing-coverts; median and greater coverts, black, tipped and edged with blue-grey; bastard wing, primaries, and flights, black, edged with blue-grey; the inner secondaries are broadly edged with ashen, and the inner primaries with a small white spot at the base of the outer web; upper tail-coverts, crown of the head, ear-coverts, cheeks, and sides of the face, blue-grey slightly washed with dusky; tail feathers, blackish with grey edgings. Lower surface: throat, breast, abdomen and under tail-coverts, ruddy chestnut; sides of body, flanks and thighs, blue-grey, a small spot of pure white at base of mandible; beak and feet, brown; iris, deep brown. Total length, 3¼ in. bare, tail 1⅜ in.

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* Now called the Small Birds' House.

Adult female: The upper surface is mostly brown, lighter and more ruddy on the lower back and rump; wings, dusky-brown, with the lesser coverts darker, primaries and flights edged with olive; upper tail-coverts, brown; tail-feathers, brown narrowly edged with olive; lores, eye region, ear-coverts and under surface, pale olive-brown; with the breast, abdomen, under tail-coverts, pale buffish-ochre. Total length, 3½ in., of which the tail measures 1⅜ in.

The description of the male is from living specimens at the Zoo.; that of the female from Museum skins.

Its range according to Museum Cat. is Guiana and Columbia to Lower Amazonia and Peru.

THE FIRE-RED FINCH.

15. *S. minuta.* Fig. 3 on plate.

This dainty finch is one of the gems of the genus; it is a trim and tightly feathered bird, full of vivacity, almost continually uttering his merry little lay. Judging by the demeanour of the specimens at the Zoo., amid the uncongenial environment of the Parrot House, they are ideal cage-birds, become tame fairly readily, and are neither dull nor listless under such conditions. As to their fitness for the outdoor aviary, well—there are few birds that would surpass them, as they disport themselves amid the greenery of a garden aviary.

Adult male: The general colour of the upper surface is brown, lightly washed with greyish-olive;

lower back and rump, deep chestnut, lesser wing-coverts, brown; median and greater coverts, blackish brown, edged with greyish-olive, lighter at the ends; primary coverts and flights, blackish brown, edged with ashy, the primaries have whitish margins with a small spot of white at the base; upper tail coverts, ashy-olive, with pale chestnut edges; tail feathers, blackish-brown, margined with pale brown and having paler tips, the centre feathers are washed with ashy-grey; crown of the head, brown, with a ruddy tinge on the forehead; lores, dusky; ear-coverts, pale brown, with light shaft streaks; cheeks, entire under surface of body, and under tail-coverts, bright chestnut; thighs, chestnut brown; there is a small patch or spot of white at the base of the cheeks; beak, black; legs and feet, blackish. Total length 4 in., tail 1½ in.

Adult female: Upper surface, dusky brown, slightly tinged with olive; rump, upper tail-coverts, and lesser wing-coverts, dusky brown; median and greater coverts, and secondaries, dark brown edged with buffiish ochre; primaries, dark brown edged with olive; tail feathers, dark brown with light tips and edged with olive; crown of the head, dusky brown; lores, sides of face, ear-coverts, cheeks and under surface of body, brownish ochre, the throat and upper neck are paler and washed with ashy-grey; abdomen, whitish buff; sides, flanks, thighs and under tail-coverts, buffish ochre. Total length 3¾ in. full, tail 1½ in. full.

The above descriptions are from living specimens at the London Zoo.

"The size of the white wing-spot varies greatly, "and is very conspicuous in some specimens and "is hardly visible in others. There is apparently a "seasonal plumage, when the bill is brown instead of "black, the plumage browner, and the brown edges to "the wing-coverts, quills, and tail-feathers broader "and more conspicuous. The young male at first "resembles the adult female, but is more decidedly "olive above, and has traces of cinnamon colour on "the rump and on the under surface. There is a considerable difference in the depth of the chestnut "colour in a series of males, and the pale colouration "of the young male tends to prove that the richness "of tint increases with age, the younger birds inclining to cinnamon rather than chestnut." (B. M. Cat. of Birds, Vol. XII.).

These are points which the aviculturist will be able to confirm or otherwise, as from information to hand it appears some of these birds will be on the market during the summer.

According to the B. M. Cat. their range is from Panama through Colombia and Venezuela to Guiana; Trinidad; Tobago; Para.

THE BLACK-HEADED LINED FINCH.

31. *S. ocellata.* Fig 4 on plate.

This is slightly larger than the preceding species, an equally desirable bird either for cage or aviary; its silken and refulgent plumage, varying according to light refraction, imparts to this species a very fine appearance, the contrasts being very striking, yet so happily blended that the effect is altogether pleasing, with an entire absence of harshness. Four specimens, two males and two females, are on view in the new

Bird House at the London Zoo., and are certainly most handsome birds.

Adult male: The upper surface is glistening greenish-black (steely-blue in some lights), except for a band of white tinged with grey, across the rump; lesser coverts, glistening greenish black; median, greater and primary wing-coverts, and flights, dull black, edged with glistening greenish black, the inner primaries are white at the base of the outer web, the secondaries are also similarly marked, but the markings are concealed by the greater coverts; upper tail coverts, glossy greenish black; tail-feathars, black; crown of head, glistening glossy black, with a few white spots forming a longitudinal streak down the centre of the crown (this white streak is not constant, and is almost invisible in some specimens); lores, eye-region and ear-coverts, throat and sides of neck, glossy black; cheeks, foreneck, breast, abdomen, sides of body, flanks and under tail-coverts, white; the foreneck and sides of flanks are regularly scaled or mottled, the feathers of these parts having the bases finely edged with black; beak, black; legs and feet, blackish; iris, deep brown. Total length $4\frac{1}{4}$ in., tail $1\frac{5}{8}$ in.

Adult female: Differs entirely from the male, having her upper surface dull olive, rump and upper tail-coverts light olive; wing-coverts, dull olive with pale ends to the median and greater coverts forming a double wing bar; primaries, flights and tail-feathers, dusky edged with olive; crown of head, dull olive; lores, eye-region, sides of body, flanks and under tail-coverts, buffish ochre; ear-coverts, pale olive; cheeks, throat and foreneck, pale buffish ochre; breast and abdomen, whitish buff. Total length 4½ in., tail 1¾ in. bare.

Hab: "Upper Amazonia, Guiana, Venezuela and Colombia." (B. M. Cat., Vol. XII.).

THE GUTTURAL FINCH.

30. *S. gutturalis.* Fig. 1 on plate.

This is another charming and also a fairly freely imported species and, as will be seen from the plate, forms a pleasing contrast with the preceding three species, *castaneiventris, minuta, and ocellata.* It is a most pleasing species for either cage or aviary; it is a good singer, but it does not utter its song so frequently as some of the other species. It is long-lived, and not unduly quarrelsome in a mixed series. In a state of nature its feeding grounds are open pastures, and its principal diet the various indigenous grass seeds.

Adult male: The upper surface is dull olive-green, upper back, blackish; lesser coverts, olive-green: median and greater coverts, dusky edged with olive-green; the inner primaries have yellowish-white bases on the outer webs; upper tail coverts, olive-green; tail-feathers, dusky brown margined with olive-green; crown of the head, sides of face, ear-coverts, cheeks, throat, sides of neck and foreneck, dusky black; breast, abdomen, sides of body and flanks, yellowish white stightly tinged with green, sides and flanks lightly mottled with black; under tail-coverts pale yellow; beak, blackish horn; legs and feet, brownish grey. Total length 4½, tail 1⅝.

Adult female: Upper surface, olive-brown, median and greater coverts are dusky, edged with olive-brown, and have their tips whitish, forming a somewhat obscured doubled bar; primaries, flights and tail-feathers, dusky with olive brown margins; crown of the head, sides of face and ear-coverts, olive brown; the ear coverts, streaked with whitish; lores, eye region, breast and abdomen, whitish-buff; cheeks and under surface of body, buffish-ochre; sides and flanks, light olive-brown; thighs and under tail covers, pale whitish-ochre.* Total length 4 in. full, tail 1⅝ in.

" *Young males* at first resemble the adult female, "but show a good deal of black on the throat and "crown, all, however, concealed by the overlying "greenish plumage.

"Hab.: Brazil, Guiana, Venezuela, Colombia, ex-"tending into Panama, Ecuador and Peru." (B. M. C. of Birds, Vol. XII).

THE WHITE-THROATED FINCH.

1. *S. albigularis.*

This, one of the most frequently imported of the *Spermophilæ*, is also a very handsome fellow, but its demeanour in the aviary is anything but amiable, he is in fact a confirmed bully, will not tolerate males of his own species in the same enclosure, and is also very intolerant of any nearly related species. Though quietly clad, his garment is very pleasing, the contrasts are sharp, yet not harsh, and he is also shapely formed. To add to his other charms, he is cheap, enduring and has a sweet little song, which he is very fond of pouring forth. This species has bred in captivity, but as the Rev. C. D. Farrar has given a full account of his success in *Bird Notes*, Vol. IV., it need not be repeated here. One point may be worth re-calling—they kept the end of the aviary where their nest was situated free from other birds. The nest is a very neat, delicate, yet very strongly woven, cup-shaped structure. The late Dr. Russ also succeeded in breeding this species.

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* Described from living specimens.

Adult male: The upper surface is slaty-grey, the feathers at the back of the neck and upper back, slightly mottled with dusky; lesser coverts, slaty-grey; median, greater and primary coverts, and upper tail coverts, blackish with ashy-grey margins; the middle primaries white at the base of the outer web forming an oblong spot; tail-feathers, black narrowly margined with ashy-grey; crown and sides of the head, dark slaty-grey, mottled with black; the forehead and lores are deep black; cheeks, throat, sides of neck, middle breast, abdomen and under tail-coverts, white, with a broad black band extending across the chest; sides of body and flanks, grey; beak, ochre-yellow; legs and feet, grey; iris black. Total length $4\frac{3}{8}$ in., tail $1\frac{7}{8}$ in.

Adult female: A full description is not necessary here for this well known species. It will suffice to say she is mostly brownish-grey on the upper surface, flights and tail feathers have blackish centres, and the first primaries white at the base of the outer webs, forming an oblong spot; lower surface white, with a brownish-grey band across the breast; beak, black; legs and feet, brownish-grey; iris black.

To be continued.

Have Birds a sense of humour?

By R. H. CLARKE, M.A., M.B., M.R.C.S.

That the more intelligent varieties of birds such as Magpies, Jackdaws, Ravens, etc., are fond of mischief is, I think, universally recognised, and of all animals this quality is most highly developed in monkeys, who enjoy the greatest intelligence; but it is common in dogs and possessed, to some extent, by many other animals.

Love of mischief is a very comprehensive and vague term, and may be exhibited in such a variety of ways that they cannot well be ascribed to anything like a common motive, and my enquiry is suggested by a class of actions which are fairly common, and which seem to be prompted by a definite purpose to tease or annoy some individual who is obnoxious to his antagonist, who regards him not merely with dislike but often with fear as well. And the tricks resorted to have a strong family likeness to those which schoolboys sometimes play on unpopular masters when they think they can carry them out at no very serious personal risk. No doubt such jokes, in the case of schoolboys at any rate, are prompted by other motives besides a sense of humour; often they are malicious, or revengeful, and there may be some evidence of similar feelings in animals. But after eliminating those which may be ascribed to such motives there remains a large class of practical jokes which are prompted more by a sense of humour than any strong feeling of hostility, and very often, though they would hardly be called malicious, there is a little flavour of malice thrown in which increases their piquancy and adds to their zest. Apparently we can detect similar qualities in some of the acts, to which I have referred above, as mischievous. They cannot be ascribed wholly or even chiefly to "malice prepense" they are not sufficiently purposive, there does not appear to be any intention, and probably no power, to inflict any definite injury, there is no effort to go beyond temporary annoyance and evidence of this seems to be sufficient reward for the perpetrator of the joke.

We are most of us familiar with the sight of Rooks, and even small birds, mobbing a Hawk. It may be said that this is more than a game, that it is a combination with the object of driving away a common enemy ; this may be so, though I do not think that is always the true explanation, and I can recall an instance where it certainly was not so. It occurred in Sweden, and in the district where I was staying there was a very strong prejudice against killing Magpies as it was believed to cause ill luck. The consequence was that Magpies were very numerous, and a large number—thirty or more— were constantly about close to the house. Hawks were fairly numerous also, and when one appeared near the house, the Magpies would often engage in a regular game. They would fly round him and in fact chase him with the evident intention of provoking him to strike at them, which he was often in no mood to do, but at last after much provocation would turn on them ; they were on the alert, keenly watching for this, and the moment he turned they made as fast as possible for a crack under a barn door which was just large enough to admit them but not the Hawk, which however often pursued them to the very door. Having failed, the Hawk would fly away and as soon as he had gone the Magpie would emerge and, after looking about carefully to see that the coast was clear, would fly out and look for the Hawk. If he was still about the same game would begin again and continue as long as he remained in the neighbourhood. If the Hawk did not respond readily to the challenge the Magpies would become very daring, and the risk seemed to possess a remarkable fascination for them and, though always managing to escape, they sometimes ran it very fine, and on one occasion the chase was so close that the Hawk actually caught the Magpie just as it reached the door and seemed to have secured a final settlement of accounts with one of his assailants, the victim however just managed to save its life but left the whole of its tail in the talons of its pursuer, and during the remainder of my stay cut a grotesque figure flying about in a very erratic manner, like a boat without a rudder. It was a curious performance altogether on the part of the Hawks as well as the Magpies. I do not think the Hawks ever attempted to catch the Magpies except when persistently provoked, apparently they could easily have succeeded when the Magpies were some distance from the friendly shelter of the barn, as they often were, and the tailless one would have been an easy prey at any time, their inclination was apparently to leave the Magpies alone, but they evidently accepted the latters' tactics as a challenge and resented it, and allowed themselves to be provoked into activity against what was presumably their better judgment, or at least their instinct and inclination, but they did not appear to harbour any lasting resentment, and their effort having failed were content to leave the Magpies alone if the latter would permit them. On the part of the

Magpies the episode was still more singular, it is difficult to assign their proceedings to any natural instinct with which we are acquainted, they appeared to be allured simply by the fascination of the sport, they were obviously fully alive to the risk, but deliberately courted danger, sometimes great danger, for the pleasure that it gave them.

Putting ourselves in their place we can easily realise a sense of gratification at the effort of the Hawk and his discomfiture, we can fancy a mischievous urchin under the circumstances taunting his pursuer with such a remark as "Sold again." But can we credit a bird with so much intelligence? The idea of danger suddenly exchanged for security, of the attack of a powerful and dreaded enemy ending in ignominious failure, these are ideas with which we are familiar and can sympathise, but they are very distinctly intellectual operations, and can we credit a bird's brain with so much capacity? It is rather a large admission, it goes far beyond the faculties with which birds, and animals generally, are usually credited. But unless we assume their possession of such ideas how are we to explain their actions? Is there not evidence in the first place of purpose to provoke a certain action in an antagonist, a recognition of the risk involved, some sort of valuation of risk on the one hand and gratification on the other, counting the cost and electing to incur it for the pleasure it will afford? Then the anticipation and quick recognition of the calculated result, the momentary excitement, not unmixed with fear, and finally the satisfaction of escape and security and triumph over a discomfitted enemy. These are many distinct ideas and not very simple ones either. Max Müller contended that ideas are impossible without language, and if he was correct we must apparently dismiss these conclusions and relegate the whole proceeding to blind and unreasoning impulses; but it seems to me that the onus rests with those who take this view, of explaining the nature of these impulses, their source and mode of origin, and it is so difficult to furnish any satisfactory solution on these lines that it is apparently more reasonable to regard the actions I have described as evidence of ideas, emotions, and calculations, differing in degree, but not in kind, from those which we experience ourselves.

The Magpie Tanager.

By J. H. HARRISON.

Large variety *(Cissopsis major)*.
Small variety *(Cissopsis leveriana)*.

[To help readers in more readily distinguishing between these two species, a full description is given below from the B. M. Cat. of Birds, Vol. XI.—ED].

C. leveriana. "Above pure white; whole head and neck "down to the interscapulium shining black; wings and tail "black; lesser wing coverts, spots at the ends of the greater "wing coverts, margins of outer secondaries, and ends of the "tail feathers white; below white; throat and breast, extend-"ing in a point down to the middle of the belly, shining "black; feathers lanceolate, under wing coverts white; bill "and feet black; whole length 10′, wing 4·5″, tail 5·4. Female "similar.

"Hab.: Guiana, Venezuela, Colombia, Ecuador, Peru, and "Bolivia."

C. major. "Above pure white; whole head and neck, ex-"tending in a point down to the lower part of the interscapu-"lium, shining black; lesser wing coverts, spots at the ends of "greater coverts, margins of the outer secondaries, and tips of "the tail feathers white; below white; throat and breast, "descending to a point in the middle of the belly, shining "black; feathers lanceolate; under wing coverts white; bill "and feet black; whole length 11·5", wing 4·8", tail 6·2". "Female similar, but rather smaller. Hab. S.E. Brazil.

"Only separable from the former by its rather larger size, "and the greater extent of the black on the upper surface."—B. M. Cat. of Birds, Vol. XI.

Tanagers as a whole are a most gorgeous group of birds, not difficult to keep in health and condition if suitably catered for; they are however but little known to the mass of foreign bird lovers. According to those ornithologists who have given close study to the classification of species they are a very large family. There are perhaps upwards of 400 different kinds of these birds.* In my small aviary I have the Scarlet, Superb, Olive-green, Tricolour, Blue and Black, Archbishop, Cuban, Palm, Blue, and Magpie. It is however of the Magpie that I have been asked to contribute a few notes, and of an individual bird. My bird is well-known to many bird lovers owing to its fairly frequent appearance on the Show bench: it is figured on another page (this line drawing I consider one of Mr. Goodchild's happiest efforts). It came into my possession in December 1903, and had been imported the previous year, by, I think, Mr. Frostick, who kept it in an ordinary garden aviary, where it was successfully moulted. This bird is the larger of the two species (*C. major*) and is so far as I can ascertain a native of S. E. Brazil. Why designated Magpie? The reason is not far to seek, inasmuch as the bird is of black and white plumage, his general appearance and temperament are not very dissimilar to those of the English Magpie (*Pica rústica*). He is of long slender and elegant build, about 12 inches long, from the curve of his short strong beak to the tip of his long narrow tail. His plumage gives him a very handsome appearance, and is very lustrous, its blacks and whites very pure and rich, and the feathers very finely formed; his eye with its large black pupil encircled in golden-amber gives to him an expression of vicacity and intelligence.

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* There are over 370 known species of the Family *Tanagridæ*.—Ed.

The smaller variety (*C. leveriana*) is approximately two inches smaller than *C. major*, and the black areas of the head and neck do not terminate in points, as they do in the larger bird (*vide* illustration). It was I think in 1899 or 1900 that I saw the smaller species at one of our Northern Shows, where it was awarded first and special for the best bird in the Show. I made several efforts to purchase it, but without success.

On the Show bench he has been very successful. He has twice won premier honours at the Crystal Palace among the keenest competition, and is I believe the only one ever exhibited there. This year at the Palace he was only fourth, why, I failed to understand. In the Provinces he has been equally successful, having been placed first at all the leading shows, including Manchester, Preston, St. Helen's, and many others. To-day he is in the pink of condition, and looking as juvenile as when I first became his proud possessor, four years ago.

All Tanagers are more or less of a timid nature, and my Magpie was at one time no exception to the rule. When he came into my possession he was wild, restless, and terrified at the approach of strangers, but familiarity and kindness have made him as companionable as any bird can be. A mistaken idea prevails, I find, about his temperament. When at the Palace Show in February last I was frequently asked if he was vicious! I can only conclude that this thought is due to the fact that he is always on the *qui vive*, in conjunction with his bright and wicked looking eyes and curved bill. Even when with other birds smaller and weaker than himself he is always amiable and quiet.*

I have spoken of his intelligence. He readily recognises my footsteps and as I approach the bird he looks in lively anticipation for a tit bit. Whenever I open the cage door he gracefully hops out straight for the mealworm tin in my hand, from which he helps himself to a substantial meal. Then he will indulge in a fly round, but never fails to return to his cage.

Diet: I am a great believer in mealworms and consider them invaluable for insectivorous birds; they may be given frequently and plentifully with the most beneficial results. The condition of my Tanagers is my best guide, and I do not think any harm can result however liberally this class of food may be supplied. Swollen feet are not, in my opinion, attributable to an over indulgence of mealworms; the only drawback I know of is their cost where a large number of birds are kept.† A good supply of ripe fruit, such as apples, bananas, pears, grapes, and oranges should be served out daily. The staple food of my Magpie Tanager consists of ants' eggs, dried flies, sponge cake, and stale bread well pounded together and as many insects as I can procure, occasionally a little carrot, potato, and Osborne biscuit may be introduced as a change. On this diet I have kept my Tanagers in perfect health and plumage for a number of years. The Magpie is very fond of his bath and is indulged four or five times a day in fresh water. He has plenty of accommodation: his cage being about 6 ft. long, 5 ft. high and 2 ft. 6 in. back to front. All my cages are semi-box style, and are arranged round a large well lighted and airy room. In fact the birds live over the sea and can enjoy a good ozone laden breeze, the windows being open night and day all seasons, except during very severe frost.

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* This may be true of an individual bird, and a bachelor at that—such instances occur with all species; it is nevertheless an undoubted and proved fact that practically all species of Tanagers are absolutely vicious, when in pairs during the breeding season, and at that time are very unsafe company for any birds smaller or weaker than themselves, neither should two pairs of the same species be kept in one aviary.—Ed.

† These insects are a perfectly safe article of diet, in fact an absolute necessity where insectivorous birds are kept, and all my birds get a liberal supply. For economy and variety I give during the summer as many bugs, beetles, etc., as the garden supplies.—Ed.

[Mr. Goodfellow in his paper "A Naturalist's Notes in Ecuador," published in the *Avicultural Magazine*, Vol. VI., Old Series, page 97, gives an interesting account of these birds as follows:—

"At the headwaters of the Napo on the Amazonian side, " we first came across the Magpie Tanager (*Cissopsis leveriana*). "This is not the species we see alive in England sometimes,— "*C. major*. I thought it was till I got my skins home, when I " found mine was a much smaller bird. The total length of the "*leveriana* is just 10", otherwise the two kinds seem to me "identical.* There may be some slight difference besides the "size, for I have not yet paid particular attention to them. " Dominicos" the Ecuadorians call them from their black and "white plumage. We did not meet them on the Napo after " where the Coca joins it, but just at that place they were fairly "numerous. I used to observe them flying past our hut, every " morning. At the edge of the forest near by, grew a number

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* Note descriptions at head of article.—Ed.

"of green bushes, and on the very topmost leaves, the Magpies "would alight. I never saw them settle otherwise than on the "very top. These bushes had clusters of small hard buds on "them, and it was these they came to eat. We were there "during May and June, and at first I thought they had nests at "that time, for they always kept in pairs; but on second "thoughts I hardly think they could have been nesting then, "for they were in heavy moult and it was difficult to get one in "good plumage."

Owing to an attack of fever lasting nearly the whole of his stay in this unhealthy place Mr. Goodfellow was unable to pay as much attention to their habits as he would have liked.

In a private letter my friend Mr. E. W. Harper, who is at present in Georgetown, Brit. Guiana, makes the following comment:—

"Amongst the birds which I saw in the clearings at the edge of the forest were some Magpie Tanagers. They looked very pretty and conspicuous with their long tails floating behind. The local name is the "French" sackie. "Sackie" means Tanager."—Ed.]

Nesting Notes, 1907.

By Mrs. Anningson.

Scarlet Tanagers.

(Rhamphocœlus brasilius).

Tanagers are such exquisite creatures, that, with all that has appeared in our magazine recently, I am sure, many will be pleased to hear about the doings of my Scarlet Tanagers. My experience of the late winter has led me to the conclusion that Scarlet Tanagers are not at all delicate, for if birds can live in an outdoor aviary without any artificial heat, through the very hard and bitterly cold winter that we have just experienced, they must be much more robust than we think. All my Tanagers have been in a cold aviary all the winter, and I cannot find words to describe how very lovely they look, their plumage is grand, the scarlet being of such intense red, with a beautiful shimmering gloss over the whole plumage, that they are indeed very lovely; but with all their loveliness, what spiteful little creatures they are! being very difficult to keep with other birds, especially those having any scarlet colour in their plumage; you cannot leave them together in the aviary without risk*; for instance, my Virginian and Red-headed Cardinals, and also the Crimson-shouldered Whydah have suffered from the continuous persecution of the Scarlet Tanagers; they could get no rest until I moved them into another aviary. All this commotion and uproar occurred about the first week in January last; I wondered if the Tanagers wanted quietude, so watched them to see if they wanted to nest. I soon found this to be the case, for one morning whilst feeding my birds, I noticed the cock Tanager pick up an empty millet spray, and fly away with it to the very highest place in the aviary, and begin to build a nest. After this was completed the hen laid some eggs, but how many I cannot say, for the nest was too high up for observation, and I dare not run the steps up, as female Tanagers are very nervous birds; however, about the early part of February, I was sadly disappointed to find two little baby Tanagers lying dead on the aviary floor. This is the second nest of Tanagers that I have had, but I regret to say, so far none of the young have been reared. I felt, after the first brood lived to be nearly a month old that they were safe, but the hen brought them out from the nest in her wings and they were killed, however I must keep on hoping for better luck next time, as the Tanagers have gone to nest again and the hen has laid one egg, and I am thankful to say in quite a different part of the aviary, not so high up, so that possibly things will turn out better this time.

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* This demeanour appears to be common with all species that have so far attempted to nest in captivity, and also with those kept in pairs as the breeding season approaches, they are very unsafe company for any birds weaker than themselves, and often for those apparently their equal in strength.—ED.

* * *

GENERAL: The season is a little early, but I have some other little birds just able to leave the nest, and to begin to fly about, viz., Budgerigars, White Java Sparrows, Cutthroats, and some little Waxbills, all doing well. I feel I have began the season very well.

* * *

RUFOUS-BACKED MANNIKINS.

My delight and surprise were great, when I discovered that my little Rufous-backed Mannikins had started nesting.* I may say these are in a cage, not loose in the aviary. How very pretty the little hen looks in her little basket nest, with the cock keeping guard on the top of the basket. I wonder if any others have began to nest, or if mine are the first pair to do so? About ten years ago these were quite common and could be bought for 6/6 a pair.

[There have been none on the market for quite a number of years, and on their reintroduction last year were sold at 50/- a pair, though some were sold quite cheaply before their species was recognised.—ED.]

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* Mr. Teschemaker has a pair of this species engaged in incubation, in his out-door aviary.—ED.

A Fascinating Hobby.

By Miss E. M. Baker.

The keeping of foreign birds is to me intensely interesting; my birds are kept in a good sized aviary and I find them very little trouble to keep in health and condition; of course I am speaking of the commoner, that is the freely imported species, that are kept by the majority of bird lovers.*

One never tires of studying their individuality, charming characteristics, song, courting movements, and endless other interesting birdy ways; which keep up an endless source of interest to the fortunate possessor of a garden-aviary and mixed series.

Most of these (the common species) reward our care, by their confidence, and readiness to nest in our aviaries.

I have two outdoor aviaries. In one I keep all kinds of small Finches and Doves; in the others are Parrakeets, Cardinals, Malabar Starlings, Budgerigars, Crested Doves, and many others.

Last year the Zebra Finches, Cutthroats, Doves, Canaries, etc., successfully reared young. It was very interesting, and quite a pretty picture to watch the old birds (Zebra Finches) and their young (after they were full grown), cuddling altogether in the nest, which was built in a toy basket.†

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* It is surprising what a really interesting series of handsome, beautiful, and engaging birds can be kept without going outside the freely imported species.—Ed.

† This species, in spite of its commonness, is a general favourite; its saucy independence, fearless demeanour, readiness to produce its kind, and even his "penny trumpet" sort of song, have won for him a place from which he will not readily be deposed, for he is still to be found in almost every collection of foreign Finches.—Ed.

A pair of Black-throated Quails, made a quaint little nest of grass, and laid seven eggs, but after incubating almost the full period, the hen forsook them; this was both disappointing and annoying, as there was a bird in each egg.

In addition to the above, the following birds have reared young in my aviaries: Budgerigars, Cockateels, Grey Cardinals, White Java Sparrows, Bengalese and Saffron Finches; and once I found a little nest containing two tiny eggs, which I believe were laid by Golden-breasted Waxbills.

At the present time I have sitting Java Sparrows, Cardinals, Crested Doves, Canaries, and some other small foreigners.

I may say all my birds have been out of doors the whole of the winter, and though this has been severe, I have not lost one through exposure, and my birds are all in excellent condition.

Editorial.

THE BANKSIAN COCKATOO: In "Canary and Cage Bird Life" for May 3rd, 1907, there appears an interesting letter, under the signature of "A Resident for Many Years in New South Wales."

"The Banks Cockatoo: Permit me first to ask, why "Banksian"? This "splendid bird was discovered by Sir Joseph Banks at the end of the 18th "Century, although the Grand Cockatoo and the Funerea have long been "known from their proximity to human habitations. With the Banks bird, "however, it is different; shy and wary, it is seldom to be approached, "existing in its grand isolation in the denser forests, and never seen in "flocks like the other species. The Banks Cockatoo is classed at the head "of the black species, but so similar is it to the Grand Cockatoo (the next "in the scale) that a visit to South Kensington Museum will show how "difficult it is for the unexperienced to decide between them—the female "is the yellow speckled bird with yellow and red tail feathers, whilst the "male is not only smaller, but a richer black, with red tail feathers. The

" few specimens of true Banks Cockatoos in captivity (three at the outside, " I understand) make their study therefore difficult, and the stringent laws " for their protection and non-exportation justify one in assuming that any " more specimens that can be smuggled out of New South Wales will be few " and far between if any. Neither the New York nor the Berlin Gardens " possess one to my knowledge, aud any assertions of foreign naturalists " must be taken *cum grano salis*. As to the Banks bird "laying" in captivity, " I should be glad to hear further particulars, and if your authority asserts " that the black bird is the hen, the phenomenon would be a land-mark in " natural history—the Banks bird is a glorious specimen, and literally " hypnotises one by its combined dignity and gentleness."

Further comment is unnecessary at this juncture; the Museum Catalogue, etc., appears to be fully vindicated—the above is also a most interesting communication on the habits of the bird, when in its native wilds. At the same time it is difficult to understand, that the writer of the communication appearing in our last issue, could have made an assertion directly opposite to the Museum Catalogue, and the sexed skins in the Bird Room at the South Kensington Museum, without some ocular evidence on which to base same.—Ed.

Miscellaneous Notes.

In the Waders' Aviary at the London Zoological Gardens nesting operations have already commenced. An almost if not absolutely unique event is the nesting of the Ring Ouzel, which so far appears to be sitting steadily; it will certainly be a most interesting event in the avicultural world if young are successfully reared. Turtle Doves have hatched and are busily engaged in feeding a pair of squabs. Missel Thrushes have also built and are sitting close, in fact being almost due to hatch. The Pied Wagtails, by their demeanour, are evidently on the same purpose bent.

In the Western Aviary the Crested, Spotted and Wonga-Wonga Pigeons are nesting.

Interesting advents to the gardens are, a number of Snow Finches (*Montifringilla nivalis*), and some young specimens of the Spotted Emu (placed on deposit by Messrs. Payne and Wallace the Australian Collectors), these are but yet small, being only eight months old: they reach a huge size when fully adult.

The Hon. L. Walter Rothschild has placed on deposit a Hawk-headed Caique, of which there was a coloured plate in last issue of *Bird Notes*. It is a darker and much duller coloured bird than the specimen described in our last issue, and appears to me to be a female.

Correspondence.

LADY DUNLEATH'S AVIARIES.

SIR,—I am glad to be able this Spring to give a very good account of my aviaries. I have never seen small birds in such beautiful condition as my Cordon Bleus and Waxbills are now in after being out the whole Winter. Every day from November 1st to middle of March the hanging duplex lamp and the small duplex burner stove were lighted. The cottage into which the birds fly every night as soon as the lamps are lighted, is about 40 feet long and 15 feet wide. It is divided by wire netting into three compartments. In the first, are the lamps, and this contains all the small birds, such as Waxbills, Cordons, Zebra Finches, Cutthroats, Mannikins, Bengalese, Canaries, Spice-birds, Avadavats, Silverbills, Nuns, etc. I have lost very few birds this Winter. On the 30th March a Canary hatched one young one. She never lays more than one egg even in Summer. The young one was a fine strong bird, but after two days it disappeared, I am afraid a mouse must have taken it. Three days ago when cutting old fern fronds I discovered a Canary sitting on two eggs. The next day the rain came down in torrents, I looked at the nest and found the bird off and the eggs swimming in water, so I took out the eggs, dried them, and put a piece of white flannel in the nest after taking out the wet feathers and moss. I then put the eggs back and made a little roof of wood and felt over the nest. After watching for a few minutes I saw the bird go back to her nest where she has been sitting ever since. I still keep the cottage doors and windows shut at night. The next compartment contains Cardinals, Pekin Robins, Weavers, Whydahs, Virginian Nightingales, Cocketiels, Californian Quails, etc. The third compartment has Pigeons and different kinds of Doves. The young Nicobar Pigeon hatched last year is doing very well. He has not yet got his white tail, and is not so green as his parents, but is a beautiful reddish-bronze colour all over. I have had my Nicobars for six years, but this is the only one I have succeeded in rearing. The old bird is now sitting on one egg—they only lay one egg and then sit; I have always found the first two or three eggs clear and generally examine the egg the sixth day, and if it is clear I throw it away and they then at once lay another in the same nest. Every year they go back to the nest on the top of an old stump high up in a corner of the aviary.

N. L. F. DUNLEATH.

THE NEW BIRD ROOM AT TODDINGTON MANOR, BEDS.

SIR,—This room is as far as position goes, nearly perfect for birds, facing west and south-west, and being at the top of the house, obtains early and late sun. Two windows, west and south-west, with frames of wire, windows (open by pulleys), with blinds to keep cool if wanted in summer. Then in two corners there are fir trees cut to fit from floor to ceiling with top boughs left on and some up from bottom as convenient perches; round these are a thick bundle of reeds from lake, making cosy hiding and nesting places.

Floor is covered with zinc, extending upwards to cover wainscotting, to make entrance by mice impossible, and the door is made secure in the same manner, by putting a piece of board across the frame to receive the zinc. The fire-place is blocked with board. A deep covering of gravelly sand is over zinc, and a large turf is in the corner. In front of windows are wires stretched just below wire frames with food tins, and below a perch. Big baths on floor and tins for the birds who prefer to eat low—such as Mynah, Oriole, and one or two others.

The walls have been painted with Hall's Sanitary Washable Distemper, white in color, so as to show up birds well. A good many nest-branches are in another corner with more reeds. In this room I have the following birds at present:—

Golden Oriole, Red-cheeked Bulbul, Lesser Mynah, Brown-throated Candinal, one pair Yellow-bellied Liothrix, White Javas, Ribbon Finches, Green Singing Finches, Madagascar Weavers, Whydahs, Diamond Sparrows, and Pintail Nonpareils.

Should any of our members want a really happy life for their birds, make a bird-room, let it be a large one. The entire cost of fitting up this room was under £6—that was painting, zinc, frames, boards, and all labour.

EDITH WARREN VERNON.

Post Mortem Reports.

(*Vide Rules*).

Mrs. E. Warren Vernon *answered by post.*

COCK COCKATIEL. (E. Wm. Chaplin). Cause of death due to the catarrhal form of septicæmia, which is a common disease at this time of the year.

COCK BRAMBLEFINCH. (Frank Howe). The bird was ve fat and had a splendid plumage. Cause of death was due to acute septicæmia associated with congestion of lungs. Had it been exposed to a draught during this changeable weather ?

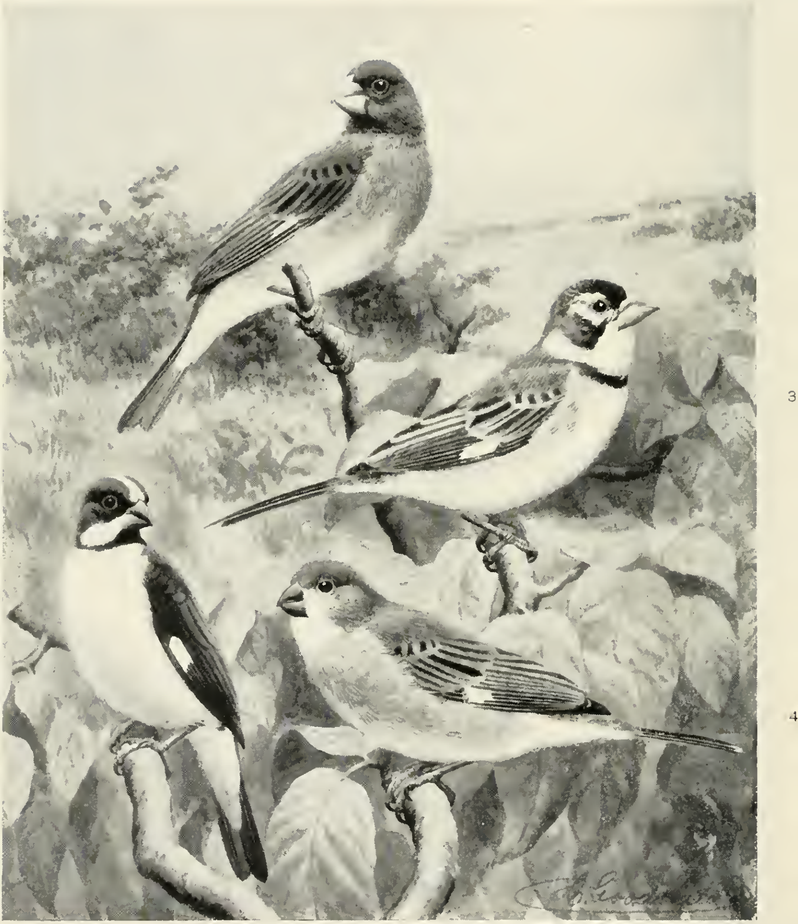
LINNET. (Mark Aronstein, Cork). Acute congestion of lungs and chronic disease of the liver and intestines were discovered on *post mortem.*

HEN BULLFINCH. (Mark Aronstein, Cork). The cause of death was due to emaciation resulting from chronic disease of the liver, acute congestion of lungs and enteritis. Do not give inga seed to your birds. Keep them scrupulously clean and free from dampness and draughts. Scrub and disinfect your cages and then expose them to the sun's rays for a week or longer.

YELLOW BUDGERIGAR. (Frank Howe). Cause of death due to a chill, partly from fear, and partly from the bad weather we have been experiencing, during a prolonged journey.

YELLOW-COLLAR PARRAKEET. *Barnadius semi-torquatus.* (J. N. Wilson, Bitterne). The sex of this bird was a male. It was somewhat emaciated and the lungs were congested. I found a bony substance in the trachea (probably a foreign body inhaled) and this would account for the symptoms observed during life. Did cuttle-fish bone enter into the dietary of this bird ?

HENRY GRAY.



1. The PLUMBEOUS FINCH.
S. plumbea

2. The LINED FINCH.
S. lineola.

3. The WHITE-THROATED FINCH.
S. albigularis.

4. The BLUISH FINCH.
S. cœrulescens.

[DRAWN FROM LIFE.]

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BIRD NOTES:

THE JOURNAL OF

THE FOREIGN BIRD CLUB.

The Genus Spermophila.

By WESLEY T. PAGE, F.Z.S.

(Continued from page 70).

THE HALF-WHITE FINCH.

2. *S. hypoleuca.*

I do not think any living specimen of this species has yet reached this country, and not having a skin in my cabinet I have been compelled to quote from the Museum Catalogue.

"Adult male: General colour, above slaty-grey; lesser wing-"coverts, like the back; median and greater coverts, dusky "blackish, edged with slaty-grey; bastard wing, primary coverts "and quills, blackish, fringed with ashy-grey, hoary-whitish "on the primaries, the inner ones of which have white bases to "the outer webs, forming a large alar speculum; upper tail "coverts, a little more ashy than the back; tail feathers "blackish, edged with ashy-grey and tipped with ashy; crown "of head like the back, slightly mottled with obscure dusky "centres to the feathers; sides of face, lores, feathers round "the eye, and ear coverts, slaty-grey; cheeks, throat and "under surface of body, white; sides of neck, slaty-grey; "lower throat and foreneck, washed with ashy-gray; sides of "body and flanks also ashy-grey; under tail coverts, white; "'bill, reddish-grey-brown' (Neuwied), 'fleshy red' (W. A. "Forbes), 'legs greyish brown; iris greyish brown' (Neuwied), "'iris brown' (W. A. Forbes). Total length 4·65 in., tail 2 in.

"I believe that two species are confounded under the "heading of *S. hypoleuca*, for some male birds are entirely "white below, without any grey on the fore neck. The only "argument against the existence of two species is that both "forms occur in the same locality, W. A. Forbes having met "with them near Pernambuco. I may mention, however, that "two forms of females, one reddish-brown and the other olive-"brown, also occurred in his collection. In one of his white-"breasted males the secondaries are also white at the base of "the outer web, forming a second alar speculum, which is "however concealed by the greater coverts. Habitat: Brazil." (B. M. Cat., Vol. XII.)

THE GREY FINCH.

(GREY GROSBEAK. *Lath.*).

3. *S. grisea.*

Adult male: Upper surface, mostly dark grey, with a slaty sheen and slightly washed with brown on the rump and upper tail-coverts; wing-coverts, blackish narrowly edged with grey on the outer webs; primaries and flights black, edged with ashy grey; the outer webs of the inner primaries are white at the base, forming a small white patch, almost obscured by the primary coverts; tail-feathers, blackish with dusky grey edgings, the centre feathers having a slightly ashy sheen; lores and base of cheeks, blackish; crown, sides of face, ear-coverts, sides of neck and throat, sides of body and flanks, dark grey with a slaty sheen; breast, abdomen and under tail-coverts, white; beak, blackish; legs and feet, brownish. Total length 4⅜ in. tail 1½ in.

"In some specimens the grey colour of the throat "extends over the breast." (B. M. Cat., Vol. XII.)

Adult female: Upper surface, mostly pale olive brown; wings, dusky brown edged with grey; crown of the head, dusky; lores, eye region, ear-coverts, cheeks, thighs and under tail-coverts, pale yellowish olive; centre of breast and abdomen, whitish. Total length $4\frac{1}{2}$ in., tail $1\frac{5}{8}$ in.

"Habitat: from Guiana to Venezuela; Trinidad, and Co-"lombia extending to Panama." (B. M. C.)

The Plumbeous Finch.

4. *S. plumbea*. Uncoloured plate, fig. 1.

Adult male: The general colour of the upper surface is ashen, rump a little lighter; tail, blackish edged with greyish brown and slightly tipped with pale ashy; lesser wing-coverts, ashen; median and greater coverts blackish, edged with ashy grey; primaries, edged with whitish grey, the inner ones white at the base of the outer web, forming a fairly large white patch (see plate); crown of head, ashen; lores, black; ear-coverts, dark ash grey with whitish shaft lines; cheeks, dark ash grey, with a small white streak at the base; lower eyelid, white; the under surface is ashy grey, with the centre of the breast, abdomen, and under tail-coverts almost pure white; thighs, whitish grey; beak, blackish; legs and feet, brownish grey; iris, brown. Total length $4\frac{1}{2}$ in., tail $1\frac{3}{4}$ in. (Described from living specimen at the Zoo.)

"Habitat: Brazil, extending into Bolivia." (B. M. Cat., Vol. XII.)

Sub sp. A. *S. whiteleyana*.

"Adult male: General colour above, pale ashy grey rather "lighter on the lower rump; lesser wing coverts like the back; "median and greater coverts dusky blackish edged with hoary "ashy on the latter; bastard wing, primary coverts and quills, "dusky blackish edged with ashy, the primaries margined with "hoary grey, the inner ones white at the base of the outer web, "forming an alar speculum; tail coverts, ashy grey; tail "feathers, blackish edged with ashy, and pale brown at the tips "of the feathers; crown of the head, like the back; lores, "dusky ashy; lower eyelid white; ear-coverts and cheeks, dull "ashy; fore part of cheeks and upper throat, white; centre of throat and under surface of body, pale ashy grey; centre of "breast and abdomen, white; thighs and under tail-coverts, "white. Total length 4·4 in., tail 1·75 in.

"Other males, apparently younger birds, procured at the "same season of the year, are much browner above and on the "margins of the wing-coverts and quills; the under parts are "also suffused with brown, which likewise deadens the white "on the throat and abdomen. Habitat: Guiana." (B. M. Cat., Vol. XII.)

Sub sp. B. *S. colombiana*.

"Adult male: Similar to the male of *S. plumbea*, but a "little paler grey, and distinguished by the feathers below the "fore part of the cheeks and the entire throat being white. "Total length 4·5 in., tail 1·65. Habitat: U. S. of Colombia." (B. M. C., Vol. XII.)

THE LINED FINCH.

32. *S. lineola*. Fig. 2, uncoloured plate.

Adult male: Upper surface, lustrous greenish black; which is also the colour of the head and neck; from the base of the upper mandible there extends a broad longitudinal band of white across the crown of the head, and the base of each cheek is adorned with a similar stripe; wings, greenish black relieved with a white patch at base of primaries, a similar patch adorns the secondaries, but this is obscured by the greater coverts; tail, black; under surface pure white washed on the sides and flanks with light grey; the throat is black; beak, blackish; legs and feet, leaden grey; iris, brown. Total length 4⅜ in., tail 1⅞ in. It ranges over South Brazil, Parraguay, Argentina and Bolivia.

Adult female: Slightly smaller, differs materially in plumage from the male, being an olive brown bird, lighter on the under surface; the wings are dusky brown, most of the feathers being margined with paler olive brown; tail, brown, margined with olive brown; lores, eye region, cheeks and throat, pale buffish ochre, and the breast and abdomen are washed with the same colour; beak, blackish brown; legs and feet, brownish flesh colour; iris, greyish brown. Total length 4 in,, tail 1⅝ in. (Male and female described from life).

"Young males at first resemble the old females, but are "generally more fulvous below, and may be detected by a little "black on the wing- and tail-feathers, or under the throat-"feathers, which form a dusky patch, followed by a whitish "patch on the lower throat." (B. M. C., Vol. XII.)

This species is but seldom on the market, and so far I have been only able to study living specimens at the Zoo. It is an alert and confiding bird, and has a soft and pleasing song.

Burmeister states that he met with this species in moist wooded districts, and that they were to be seen in small flocks. It is found in Brazil, Guiana and Venezuela.

Dr. Sharpe, in the B. M. Cat.,Vol. XII., gives two sub species.

Sub sp. A. *S. trinitalis.*

This inhabits Trinidad, and has the longitudinal white band on the crown of *lineola* represented by a few white spots only.

Sub sp. B. *S. amazonica.*

This, the Amazonian form (male), has neither white streak nor white spots on the forehead. Total length 3·9 in., tail 1·65 in. The female is much browner than the female of *lineola,* and lacks the olive tinge of that species, and is much browner below. Total length 4 in., tail 1·6 in.

The Bluish Finch

29. *S. cœrulescens.* Fig. 4, uncoloured plate.

This is very similar to *albigularis* in plumage, and compared with that species its song is much inferior; nevertheless, it is a pleasing species, and merits a place in all collections of Finches, but unfortunately it is but seldom that an opportunity occurs for obtaining it; up to the present, with the exception of *albigularis,* all the genus are only occasionally to be purchased. I do not consider it merits a separate description: it differs from *albigularis* in its slightly smaller size (*cœrulescens* 4¼ in., *albigularis* 4⅜ in. full. some specimens quite 4½ in.), and black chin-patch. its nest is strong and cup-shaped; its eggs are white, spotted with either black or grey.

"The male in seasonal plumage is washed with olive brown "on the back, wings and tail, and the head and ear-coverts are "ashy grey, the black being visible only on the base of the "forehead, lores and fore part of the ear-coverts. It is evident "that in the full plumage the ashy grey colour becomes "abraded and the black spreads over the crown. The black "spot on the throat and the band on the fore neck are both "overshaded with grey." (B. M. C., Vol. XII.)

The adult female is mostly olive brown above, wing- and tail-feathers, dusky brown edged with olive brown; eye region and cheeks, dull white washed with ochreous on the cheeks; under surface mostly buffish brown, pale and washed with yellowish on the abdomen; under tail-coverts, buffish ochre. Total length 4½ in. bare, tail 1⅝ in.

(*To be continued.*)

The Amethyst Starling.

By E. Hopkinson, D.S.O., M.B.

Pholidauges leucogaster, the White-bellied (or to use the Zoo's prettier and less anatomical name), the Amethyst Starling, is certainly one of the handsomest of the West African birds I know. It is, however, but very rarely imported into England,—so rarely that a male I took home to the Zoo last year was the first specimen they had ever had there, and, as far as I could ascertain, almost, if not quite, the first to reach England alive. Why this should be the case I do not quite understand, as they are by no means rare in their own country or difficult to keep in captivity, while the beautiful plumage of the male, glossy royal purple contrasting with pure white, would ensure his fetching a good price in the market and taking high honours on the show-bench. I have had two males as cage-birds since I have been in the Gambia, and to judge from my experience with these, this Starling takes readily to cage-life, keeping his beautiful plumage in spotless condition, and thrives well on any ordinary soft-food mixture. He soon becomes tame, has a fair share of the usual Starling intelligence, and although he is no great singer, his notes are pleasing to the ear, being a series of soft fluty whistles, very different from the harsh screams and cries of his relations the Glossy Starlings.

The plumage of the male is as follows: Whole upper surface including wing-coverts, together with the sides of the face, throat and upper chest, royal purple with metallic reflections, bluish or reddish according to the light or its angle of incidence; this varying sheen under certain lights, more particularly when the bird stands facing the setting sun, often gives the throat and breast the appearance of a glowing ember, so that the bird looks as if it was red-breasted, although no sign of such colour is visible under ordinary illumination. The rest of the under surface is pure white with a pale greyish tinge towards the sides. The lores, chin, a line through the eye and the primary quills are black; the edge of the wing white, its under surface blackish grey; tail-feathers blackish with a purple gloss above, except the two centre ones, which are entirely purple; below it is a very dark grey. Some males have brown edges to nearly all the purple feathers; this one finds chiefly in birds shot during the dry season. These may be young birds, or on the other hand the full brilliant plumage may only be attained in the rains (the breeding season) by the shedding of these brown edges. Both my birds were caught just before the rains, and these two had no sign of brown edging.

The female is very different from the male; above brown, mottled, most of the feathers having lighter edges; wings and tail darker; below whitish with an indistinct rufous band across the chest. Length about 6½ inches, that is rather larger than a Nightingale. Irides bright yellow in the male, a paler yellow in the female; bill and feet black in both sexes.

In the first of the two volumes on West African birds in the Naturalists' Library published as long ago as 1843, Swainson describes both sexes of this species and gives a plate of the male. The latter is accurate as to shape and attitude, but does not give the least idea of the natural colour, which in the plate is represented as a dark indigo instead of the lovely clear purple it actually is. On the other hand his description of the male's gleaming plumage with its glancing play of colour is so accurate, that I cannot do better than quote it here. "This is the least, and may be "almost pronounced the most lovely species of the "group; for although it has not such a gorgeous dis-"play of many colours as some of its companions, the "inimitable richness and variability of the scale-like "feathers of the body, renders it quite a gem among "birds. The colour of these feathers is metallic, and "all the same; but with this difference, that in some "lights they appear of the richest purple, and in "others of the deepest lilac, so as to appear almost "red. . . . . The male has the whole "of the head, neck, breast, back, middle tail-feathers, "and the greatest part of the wings, of a rich soft "satiny appearance,—of the deepest and richest blue, "glossed with purple when held from the light, but "which changes to a fire-coloured red, resembling "lake, when the bird is held between the light and "the spectator. This colour, upon the lesser quills "and the lateral tail-feathers, only covers those parts "which are exposed; the rest, and the whole of the "primary quills are black. From the breast to the "under tail-coverts, the plumage is of a snowy white-"ness."

The range of this species extends throughout West Africa; in the Gambia they are not uncommon, chiefly within about 50 miles of the coast, where the bush is in most places thicker than farther inland, and apparently more suited to their requirements. Near Bathurst, the capital, one meets with them in the thickets which border the road running through the swamp, which extends behind the sand-barrier of the sea-shore. They are generally found in pairs, flying from bush to bush, the male usually leaving cover first, to be followed a few moments later by his plainly attired mate. Their food consists of various berries and bush-fruits, especially those of the "Soto" tree, a kind of wild fig, which is very plentiful in this country; one of these, when its fruit is ripe, is always alive with different species of fruit- or nectar-eating birds, and among the crowd a pair of Amethyst Starlings will probably be found. They also eat a good many insects, especially, I think, those kinds attracted to over-ripe or rotting fruits, but at times one also sees them hunting ants or other creeping things on the ground.

In captivity, as I said above, they are not difficult to cater for; my two birds lived for the first month after capture almost entirely on live "Bug-a-bug" or white ants, the insect-food so easily (fortunately for birds, but unfortunately for the owner of stores or boxes) obtainable out here. Later on I got out a supply of one of the advertised mixed "Insect foods," and on this and soaked dog-biscuit, the one which I succeeded in bringing home did well for the three months I had him out here. Eventually he reached the Zoo. fit and well in spite of all the travelling he had done by land and sea, and there he was still flourishing when I left England at the end of my leave, eating chiefly the soft-food mixture used there, but occasionally taking a peck or two at a piece of banana or orange. With me he hardly ever touched any fruit, in fact he seemed quite content with the very uninteresting-looking food-mixture, the only preference he had being for the ants' eggs, which he always picked out first but after they were finished he always cleared up every scrap of the meal or biscuit which formed the basis of the food. He delighted in his bath, taking one whenever he got the chance, and very soon became tame enough to take an insect from the fingers, if it was one he liked; but his tastes in this line were distinctly delicate, as he would have nothing to say to a grasshopper or other hard-skinned beast, but approved of anything small, soft and squashy,—cockroaches, even babies, the only sea-luxury available for bird passengers, he would not even look at, so that on board ship his diet was of the simplest, but simple as it was it evidently agreed with him, as he arrived in practically perfect health and condition.

In Senegal and other parts of French West Africa the native skin-hunters shoot a good many males for their skins, for which they get about a franc apiece, but I have never seen or heard of a single one being caught alive by the professional native netters, even by those who catch the ordinary Glossy Starlings; the birds' irregular wanderings and comparatively solitary habits are its safeguard, as the native catcher generally sets his nets at water, or at any rate at a place where he can catch numbers at a time: he has no use for birds which can only be caught "one-one," as the expressive language of the Coast has it. From *Pholidauges*' point of view may this long continue, though I must confess to wishing that a specimen or two would find their way to the show-bench, as I am sure such an appearance would cause quite a small sensation among foreign bird fanciers.

Some "Birdy" Rambles in Europe.

By Sidney H. Snell, M.D.

I am proposing to give under this heading some notes on birds which I have observed during various holiday rambles in Europe. The question had often presented itself to my mind as to what extent anyone acquainted only with British birds would be interested in or conversant with the birds to be encountered on the usual French, Swiss, German, Austrian and Italian tours. The reader of these notes will find that question answered to a large extent, but they make no pretence to being anything more than observations on birds seen during generally rapid travels through, or brief sojourns in, the parts named.

On our country walks our method—for my wife is associated with me in these observations—is that each of us is armed with powerful field glasses, and if we wish to observe and verify a particular bird, perhaps singing on some outlying bush or tree, we approach, if practicable, by two different routes, when one of us nearly always gets a good view. In this way we often see the birds just as well as if they had been shot and were in the hand. Added to this, the notes of all the smaller birds in the British list are well known to us, so that it may be taken that although no birds were killed for the purpose any birds mentioned were verified beyond any reasonable doubt.

Let us take first a trip we have just completed, the general scheme of which was through France to Genoa, Rome, Florence and Venice, then up to the Austrian Tyrol, and home viâ Zürich. Of these, the longest stay, and by far the most fruitful ornithologically was at Innsbrück in the Tyrol.

During our railway journey through the districts near Abbeville and Amiens in Northern France, especially by the well watered fields round Amiens, we saw very large numbers of Magpies. Very handsome these fellows looked in the bright sunlight, and we soon counted a score or more. In the poplars growing from the water's edge were enormous numbers of their nests. I use the word "enormous" in comparison with their comparative rarety at home, for it was often possible to see from the carriage window half-a-dozen of their nests at the same moment. Now these were observations taken from a flying railway train, just going through one line of the country, and if we saw so many on one line, what huge numbers must be scattered over those districts! Possibly these few remarks may arouse members who have sojourned in these parts to give us some information on many points which suggest themselves, e.g. Why are the Magpies in such profusion? Are they protected by the natives? What is the effect on smaller bird-life, especially as regards probable raids on their eggs and young? And why do not the ordinary ornithological books mention the immense numbers in these districts? As far as we could see from the train, we observed no other birds except Crows, which occurred frequently in about the same numbers as the Magpies. The nests seemed to be about equally divided between these two species; of course we could only guess at the Crows' nests, but the lattice work domes over the others showed clearly the Magpie builder. Another point: all the Magpies' nests were high up in the trees—mostly poplars—whereas, as is well known, in the British Islands they usually build comparatively low.

Has this added security anything to do with their plenteous numbers? The trees, at the end of April, were almost bare of leaves, so that both birds and nests could be plainly seen from the rushing train.

As far as we observed, the presence of such numbers of Crows and Magpies was having the effect on smaller bird-life that one would expect; for we saw no signs at all of the smaller birds.

Our first stop was at Genoa, where we confined ourselves to the town, and we can only say that this city, in common with nearly every Continental city, is free from the enormous swarms of Sparrows which occur in our English towns. Owing probably to the smaller size and purer air of these cities, birds, which with us are only found well out in the country, penetrate into the gardens and parks. Thus Chaffinches are nearly as common in the parks, gardens, and squares of the Continental cities as Sparrows are in ours. Very handsome they look, and so tame in their bold dashes on any crumbs scattered for their benefit. Italy, as all the world knows, is singularly destitute of small birds — little birds spitted and cooked on "polenta" have apparently too strong an attraction for the Italian taste to be resisted.

We reached Rome to find there had been weeks of wet and cold weather, with vegetation very backward, indeed more so than in England. However we brought fine weather with us and it was sunny and bright during all our stay. Doubtless the birds also were backward with their migrations, at any rate the tale of species met with is soon told. Firstly we saw two or three Sparrows in Rome, but in such beautiful plumage, a strong testimony to the cleanliness of the air and houses outside at any rate. Two of these were on the Palatine Hill, and we had never before seen such magnificent white ear-coverts.

In the small but fashionable park, the Pincio, we observed a pair of Blackcaps and an occasional Blackbird. In the Colosseum and other ruins, Wrens sang gaily on every side, creeping round the old walls in busy search for food. Standing in the middle of the Colosseum I heard as many as four singing at the same time in different parts. Jackdaws also made their home in its walls.

A long day out on the Alban Mountains, above Frascati, about twenty miles from Rome, where vegetation was also very late, scarcely any of the trees being in leaf, revealed the notes of the Wryneck, Bullfinch, Greenfinch and Chiffchaff, but only just one of each. Even Tits were conspicuous by their absence. A few Nightingales were just beginning to sing.

One ideal, cloudless day, we made an expedition to Hadrian's Villa and Tivoli. Taking our afternoon coffee at an open-air restaurant whence one looked sheer down on the magnificent gorge and cascade, we had a splendid view of the two species of birds which inhabit its recesses, namely Rock Pigeons and Jackdaws, of which the latter were by far the most numerous.

We were much struck by the beautiful appearance of these Jackdaws in their spring breeding plumage. The grey at the back of the head had become in many birds a pure white gradually shading into a grey mantle, but above, sharply bounded by a jet black cap. Owing to our position above them as they flew about or settled on trees and rocks we had a most excellent view of these parts. We had never before realised how beautiful a bird it may be.

(*To be continued.*)

Humming-Birds at the Zoological Gardens.

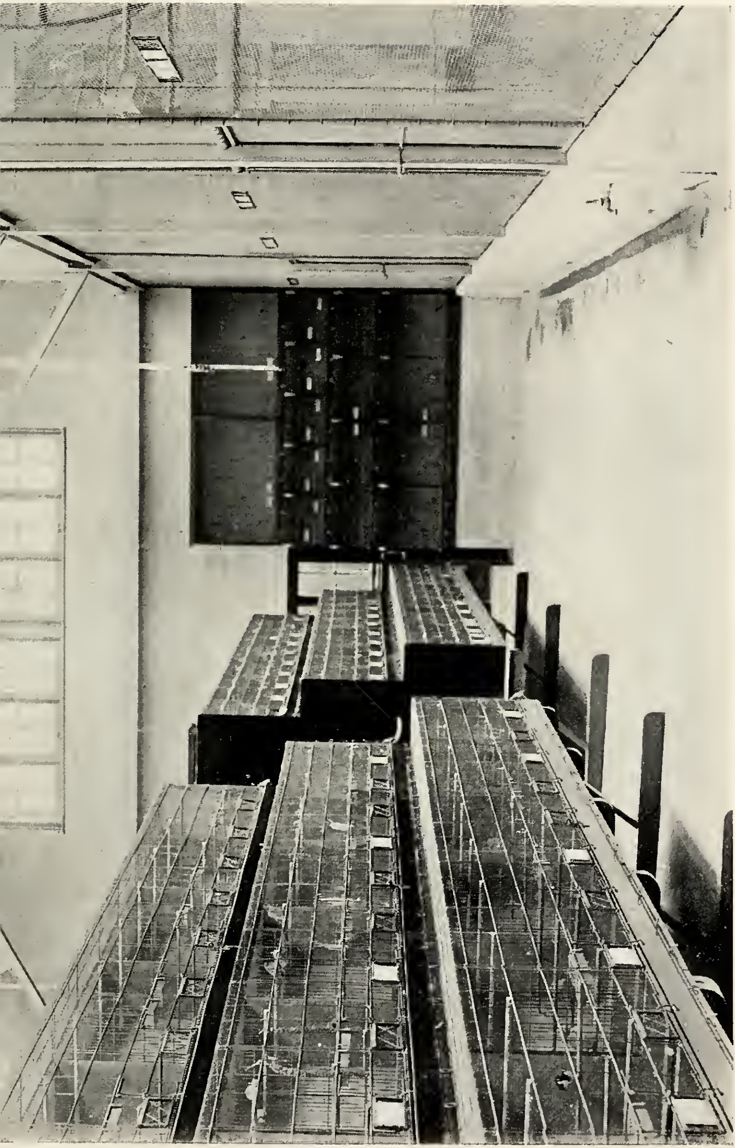
By H. Goodchild, M.B.O.U.

The Zoological Society had the good fortune to receive, on May 27th, a consignment of twenty Humming-Birds—the third that has come in the last eighteen months—for which, as for the two preceding lots, it is indebted to the generosity and enthusiam of Captain Pam, F.Z.S.

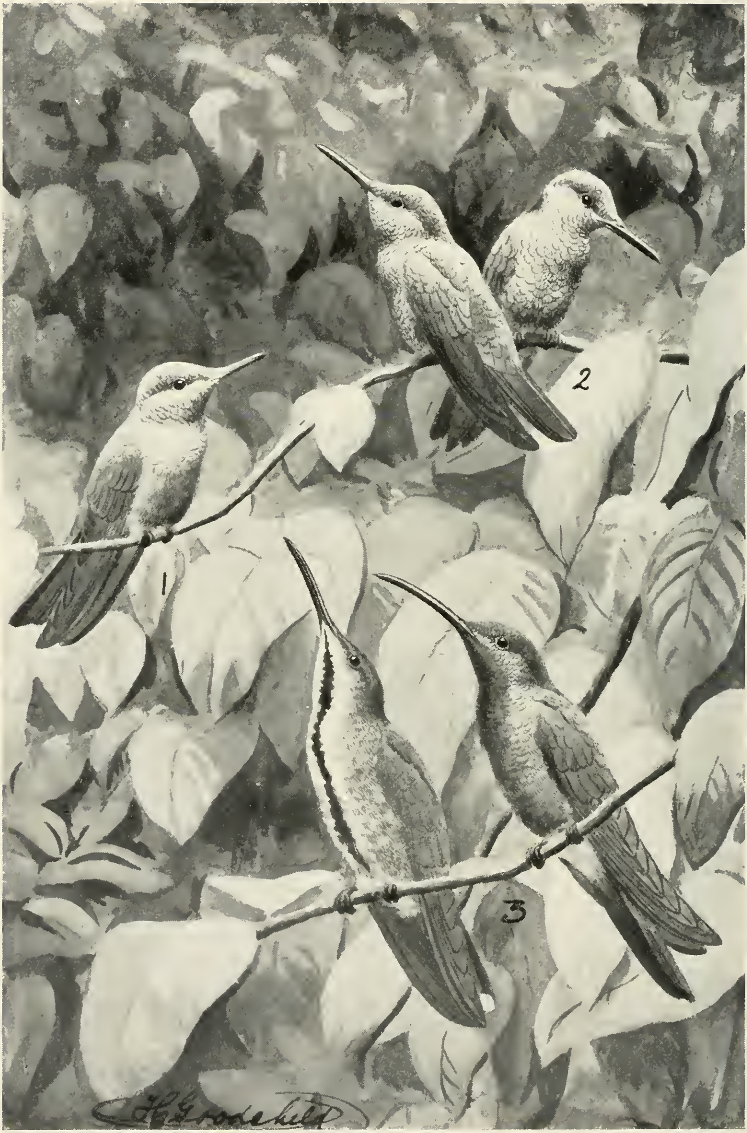
Originally some fifty birds were collected, about two-thirds of which were got on board ship and twenty arrived at the Gardens. At first there were five species represented—thirteen Blue-tailed Amazilis (*Amazilia feliciæ*) two Ruby-crested Humming-Birds (*Chrysolampis moschitus*), a Blue-headed Sapphire (*Eucephala cærulea*), an Œnone Humming-Bird (*Chrysuronia œnone*), and three Prevost's Mangos (*Lampornis prevosti*).

I had the good fortune to see these birds on the day after their arrival, and noticed that, in the dull weather which prevailed, they looked, for the most part, very draggled and depressed. The third day, however, was brighter, and the sun had a very marked effect on the birds themselves, they being much more vivacious while it was shining.

Several of the birds succumbed in the first week, and it is to be hoped that the care and thought the authorities are taking with the survivors will be re-



SMALL BIRDS' HOUSE



HUMMING BIRDS.

1. Ruby Crest (*Chrysolampis moschitus*). 2. The Amazilis ♂ & ♀ (*Amazilia feliciæ*).
3. Prevost's Mango ♂ & ♀ (*Lampornis prevosti*).

DRAWN FROM LIFE.

warded. The whole series was placed in the cases (one can hardly call them cages) which were specially designed for the last lot that were sent over, and flowers in bloom were put inside too. I noticed the birds hovering in front of the flowers, and I saw one bird hanging on to a large bell flower and investigating it with his head thrust in as far as it could be put. Aphides were provided, and the winged ones rising in the air from the infested leaves that were put in, were caught in the air by the Hummers, which seemed to enjoy the treat of living insects. Several kinds of food were given, mostly liquid, including syrup, marmite, and latterly, milk. Of the three species I saw, a a plate accompanies this article, and the following are notes taken from Gould's magnificent monograph on the Humming-Birds, and the British Museum Catalogue, Vol. XVI.

BLUE-TAILED AMAZILI (*Amazilia feliciæ*, Elliot).

"Adult: Similar to *A. erythronota*, but with the tail rather brighter steel-blue.

The colour of the back of this bird varies from reddish coppery to green, and it is quite the exception to find a specimen as green as represented in Gould's plate. The lighter, brighter tail alone seems to separate *A. feliciæ* from *A. erythronota*, but the difference is so slight that it is more than probable that both birds and *A. tobaci* will have to be placed under one specific name. Habitat, Venezuela." (B. M. Cat., Vol. XVI., p. 226).

"I have not been able to detect any difference in the colouring of the sexes and I believe their discrimination will be impossible unless dissection of freshly killed examples be resorted to." (Gould. Vol. V., pl. 317).

Length about 3½ in., wings nearly 2 ins., tail 1¼ ins. bill ¾ in., (top two figures in accompanying plate).

THE RUBY-CRESTED HUMMING-BIRD.
(*Chrysolampis moschitus*).

" Generic characters. Culmen feathered down a long way from the base and nasal covers completely hidden. Sexes dissimilar. (One species only).

" Adult male. Upper surface rich dark brown, darker on the anterior part of the back; crown, nape and back of the neck glittering ruby-red; throat and breast glittering topaz-orange; abdomen dusky brown; under tail coverts and tail chestnut red, the latter tipped with black; bill black. Total length about 3·5 ins., wing 2·25, tail 1·3, bill 0·75.

Adult female. Upper surface dull green, tinted with bronze on the back of the neck; sides of the head and under surface dusky white, darker on the breast; under tail coverts nearly white; tail purple black, the central retrices bronzy green, the lateral tipped with white.

Young male, like tne female, the glittering feathers of the adult first appearing in the middle of the throat and afterwards on the crown.

Habitat: Tropical America from Bahia to Guiana, the Amazon Valley, Trinidad and Colombia." (B. M. Cat., Vol. XVI., p. 113).

Gould remarks that although this bird is one of the first known to European naturalists, and one of the most conspicuous and beautiful of the group, practically nothing appears to have been known of its habits in his time. Unfortunately this species was one of the first to succumb after the arrival of the consignment, though I had time to make the studies from which the figure of the plate was drawn.

PREVOST'S MANGO (*Lampornis prevosti*).

" This genus comprises many species, some of which inhabit the West Indian Islands, and others the mainland. The best known among them, the *Lampornis mango*, has a wider range than any of the others, as will be seen on reference to my account of the species. They are all distinguished by the harmonious colours of their ample tails, which are even more beautiful in the females than in the males."

"The male (*L. prevosti*) has the head and all the upper surface, wing coverts, sides of the neck, flanks and abdomen rich golden green; throat velvety black, bordered on each side with glittering green; centre of the abdomen bluish green, vent and a tuft on each flank white; wings purplish brown; upper tail coverts and two central tail-feathers coppery bronze; lateral tail feathers fine purple; under tail-coverts purple, spotted with green.

The female has the upper and under surface dull golden green, interrupted down the throat and abdomen by an irregular mark of black, bounded on each side by a similar one of white; vent white; under tail coverts light green, edged with white; two centre tail feathers bronzy green; lateral feathers purple at the base, crossed by a steel blue band near the extremities and tipped with white." (Gould. Vol. II., pl. 75).

Habitat: Guatemala and Honduras.

Of the remaining two species, as I did not see see them in life, I forbear to describe them,* hoping that they may yet be seen in their full beauty to gladden the eyes of ornithologists at the Zoological Gardens.

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*[Blue-chinned Sapphire (*Eucephala cœrulea*) dark glossy green on the upper surface, glistening golden green below; chin, blue; under tail-coverts, bright green; tail, steely-blue. Œnone Humming-Bird (*Chrysoronia œnone*), upper surface, golden green; under surface glistening green—areas of colour very variable. The plumage of these minute avian gems is ever varying owing to light refraction.—Ed.].

Aviculture and Zoological Theory.

By D. Dewar, I.C.S., F.Z.S.

It seems to me that aviculturists have not rendered to zoological theory that service which might have been expected of them in view of the exceptional opportunities they enjoy of becoming acquainted with the *vie intime* of birds.

This is possibly because many of them are practical men and women, who care but little for theory and so have not taken the trouble to acquaint themselves with the matters round which controversy rages. It is in the hope of elucidating information which will throw light on some of the zoological problems of the day that I pen these lines.

In the first place what is it that determines the colours of birds' eggs? The commonly-accepted theory appears to be that birds' eggs are protectively coloured, so coloured as to render them inconspicuous when in the nest. This theory is fully set forth by A. R. Wallace in his *Darwinism*. As I have already pointed out in Vol. XV. of the *Journal of the Bombay Natural History Society* this theory seems untenable when applied to eggs that are laid in open nests. Birds which construct such nests rely for the protection of their eggs either on pugnacity and watchfulness or on the concealment or inaccessibility of the nest. When once a nest has been discovered by an egg-eating animal no amount of protective colouring will save from destruction the eggs it contains.

The reasons why I believe that eggs laid in open nests are not protectively coloured may be briefly summed up as follows:—

1. Allied species of birds, even though their nest-

ing habits are very different, as a rule lay similarly coloured eggs.

2. Eggs laid in domed nests certainly do not need protective colouring, yet many of these are coloured.

3. The same is true of many eggs laid in holes.

4. The protective resemblances of eggs which are laid on the bare ground are apparent to everyone, which certainly is not true of those deposited in nests.

5. Many birds lay eggs which exhibit very great variations.

6. Some birds lay several types of eggs, and these sometimes differ from one another so greatly that it is difficult to believe that they are the products of the same species.

If we accept this view we have to discover what it is that determines the colours and markings of eggs. It seems to me that the aviculturist is the best person to elucidate this.

When I was a boy I used to keep a few fowls of different varieties, and when I found an egg I was able to tell which of my hens laid it, even though I possessed more than one hen of each breed. It was by the texture quite as much as by the shade of the eggs that I used to distinguish them. Does this apply to all birds, does every hen impress her individual stamp on the shell of each of her eggs? The colouring matter present in many eggs is, I believe, of an excretory nature, being composed of various bile pigments. Does stimulating food tend to increase the amount of pigment deposited in an egg? Can the quantity of this colouring matter be increased or decreased by artificial means? I notice that Dr. Albert Günther in a most valuable paper on the breeding of the Red-backed Shrike in captivity, contributed to the October (1904) issue of the *Avicultural Magazine*, says of the second clutch of eggs laid by this species, (after the first brood had been killed by cold) "they were more brightly ornamented than those of the first clutch, the brown spots near the broad end forming an almost confluent deep-coloured circular head." Has he any theory to account for this; does he attribute it to the more favourable climatic conditions under which the eggs were laid?

Another point regarding birds' eggs upon which the aviculturist should be able to throw much light is the period of incubation. It is usually assumed that this period is constant for each species. I am inclined to doubt this. It probably varies with the temperature of the air and the closeness with which the bird sits. Some individuals are naturally closer sitters than others. Again the closeness with which a bird sits probably varies with the temperature. In India a bird thinks nothing of leaving its eggs for an hour or two on end every day.

While investigating, last summer, the habits of the Indian Koel (*Eudynamis honorata*), which is parasitic on the Indian House-Crow (*Corvus splendens*) I had occasion to note the incubatory period of Crows' eggs. My method of experimenting was to send a climber up to each nest every morning and have the eggs lowered to me. When a new egg was lowered I marked the date on it and was thus able to ascertain how long it took to hatch out. These experiments showed that there is a good deal of difference in the time of incubation even among eggs in the same clutch. The results of these experiments may be thus summarised.

Nest No. I.

Date on which egg was found in nest.	Date of appearance of young bird.	Time occupied in incubation.
June 13th	June 29th	16 days
June 14th	June 29th	15 days
June 16th	June 30th	14 days
June 17th	July 2nd	15 days

Nest No. II.

June 13th—got damaged		
June 15th	July 2nd	17 days
June 16th	July 2nd	16 days
June 17th	July 4th	17 days
June 18th	July 5th	17 days

Nest No. III.

June 15th	July 3rd	18 days
June 18th—disappeared		
June 20th	July 5th	16 days
June 22nd	July 6th	15 days

Thus of the eleven eggs observed, the period of incubation lasted 14 days in one instance and 18 days in another, while the incubation of three occupied 15 days, three took 16 days and three 17 days.

Another important problem on which the aviculturist should be able to throw some light is the cause of sexual dimorphism in birds. In some species the cock and hen resemble one another so closely that it is impossible to distinguish one from the other by their outward appearance, while in others as, for example, in the New Guinea Eclectus (*Eclectus polychlorus*) the two sexes differ so greatly that ornithologists at one time took them for different species. How are we to account for this sexual dimorphism?

Mr. Wallace, it will be remembered, asserts that the comparatively dull colouring of the female in sexually dimorphic species is due to her greater need of protection. According to Wallace the hen alone incubates and she is exposed to peculiar danger, liable to be attacked by birds of prey while incubating, hence natural selection has prevented her from developing all the brilliant colours and showy plumes that characterise the male. Wallace adduces much evidence in favour of his theory. Ingenious though it be, the hypothesis will not bear close scrutiny. In the first place birds of prey usually direct their attention to flying objects; it is, I believe, very unusual for them to attack birds that are sitting on their nests, hence an incubating bird is not exposed to any peculiar dangers. Again, Wallace was wrong in assuming that in the case of all sexually dimorphic birds that build open nests the inconspicuously-coloured sex alone incubates, and it is here that the aviculturist can speak as one having authority, for he is frequently able to watch the whole process of incubation very closely. My experiences as a field naturalist show that in some species in which sexual dimorphism is very marked and which build open nests, the cock and hen share in the duties of incubation.

The splendid Indian Paradise Flycatcher (*Terpsiphone paradisi*) is a case in point. The hen is in shape and size like a Bulbul, her crested head is jet black, and all the rest of the plumage, save the greyish breast, is a rich chestnut colour. The old cock bird is snowy white, except for his metallic black head. Two of his tail feathers attain a length of twenty inches and look like white satin streamers. The bird builds a deep cup-shaped nest, in which the cock frequently sits and is, when sitting, a very conspicuous object. In fact the easiest way to find the nest of this species is to look for a sitting cock. It is thus evident that Wallace's theory does not explain the comparatively dull plumage of hen birds. The experienced aviculturist can, I am sure, cite from his own experience other examples of showily-coloured cock birds sitting on the eggs in open nests.

Charles Darwin sought to explain the phenomena of sexual dimorphism by his famous theory of sexual selection. He devoted much labour in the attempt to show that in nature circumstances are such that the hens are able to pick and choose their mates. He further maintained that the hens have an eye for beauty and select the most handsome of their suitors. It is on account of this feminine selection, this tyranny of the female, that the splendid plumage of the cock bird has arisen. This theory has never commanded anything like universal acceptance, and it is, I believe, at present the fashion to poke fun at it. The subject is one on which the aviculturist can scarcely fail to throw light if he take the trouble to do so.

The following questions arise in this connection:

1. Do birds exercise what we may call conscious selection? Does a bird mate with the first suitor that presents itself, or does it look around until it meets a kindred spirit?

2. If birds do exercise such selection, what determines the choice, is it beauty of plumage as Darwin thought?

3. Does the hen alone select as Darwin supposed, is the cock ready to mate with every old hen he meets?

The aviculturist should try to answer each of these questions from his or her experience. It is my belief that birds do consciously select their partners, that there is something in sexual selection. I do not think that it is so much beauty of plumage as strength and vigour and intensity of the sexual desire that birds find attractive in the opposite sex. Nor do I for a moment accept Darwin's view that the hen alone exercises selection ; I am inclined to think that selection is mutual. The hen takes the best cock she can get, and the cock selects the best hen available.

This article has already reached a greater length than I intended it should. I must, therefore, be as brief as possible in setting forth the main reasons for the views which I hold. I would add that my position is a tentative one ; my object in writing is either to obtain confirmation of my beliefs or such evidence as shall render them untenable.

Charles Darwin gives, in his *Descent of Man*, many proofs that hens select their partners ; it will, therefore, suffice if I cite one instance that has come under my personal observation. There are in the Zoological Gardens at Lahore a number of Albino Peafowl. These are placed in the run occupied by the ordinary coloured Peafowl. A hen will not so much as look at a coloured cock if there be a white one in the same run. Curiously enough Mr. Tegetmeier cites, somewhere or other, the case of some Peahens which preferred an old pied cock to a number of beautiful japanned ones. Here then is a clear case of conscious feminine selection.

As to what determines the choice of a partner, I do not think it is outward appearance. A Peacock who has lost the greater part of his train will take as much pleasure in showing it off as he did when it was intact. According to Mr. Tegetemeier "a Gamecock, though disfigured by being dubbed, and with his hackles trimmed, would be accepted as readily as a male retaining all his natural ornaments." Mr. William C. Beebe, Curator of Birds at the New York Zoological Park, gives, on page 12 of Vol. III. of the *Avicultural Magazine*, similar evidence. "One more interesting fact about courtship among birds," he writes, "is that it is not always the most highly decorated suitor, nor the one victorious in combat, that wins the female for whom he is putting forth his utmost efforts. I have seen a Peahen show a very decided preference for, and ultimately pair off with, a young bird who had but small display and was almost spurless." He goes on to quote the case of a Mallard who chose as her mate a drake, whose tail had been shot away, in preference to two other drakes in magnificent plumage.

It seems to me that we are apt to attribute to birds more æsthetic tastes than they enjoy. What a bird seeks in its partner is strength and vigour and ardent sexual desire. These features are usually accompanied by brilliant plumage, hence the idea has arisen that hens select the most beautiful of their suitors *on account of their beauty*. Darwin made this mistake, although he admits that much of the evidence brought forward by him tends to show that the hen selects "the most vigorous, defiant, and mettlesome male."

But what really vitiates his theory of sexual selection is the assumption that the hen alone does the choosing, that the cock, like Barkis, is always "willin'." This is certainly opposed to the behaviour of human beings; among us the ladies, not infrequently, run after the men, why then should not this happen among birds?

I have witnessed two hen Orioles (*Oriolus kundoo*) fighting, presumably over a cock which sat in a tree watching the contest. Similarly I have seen a hen Paradise Flycatcher drive away another hen and then go and spread her wings before a cock bird.

I know a man who tried by killing the cock to prevent a pair of common Sparrows from nesting in his verandah. The hen shortly after reappeared with another husband. He shared the fate of number one. Nothing daunted, the hen turned up with a third. He, too, died the death, and the process continued until the hen brought along her seventh husband! Then my friend gave up the unequal contest. Conversely, a pair of Yellow-throated Sparrows (*Gymnorhis flavicollis*) elected to nest in a hole in an old tree in my office compound; as specimens of this species were required for the Lahore Zoological Gardens, I directed the pair to be caught. My men succeeded in securing the hen, but the cock managed to escape. The next day the bird reappeared with a new wife.

I believe that if ornithologists would set aside pre-conceived ideas and watch birds carefully, they would be able to record many instances of cock birds exercising selection. So great a foothold has Darwin's theory obtained that whenever we see one bird chasing another we at once set the former down as a cock.

If sexual selection is mutual, as I believe it to be, we have to find some other explanation of sexual dimorphism, of the more showy plumage of the male.

Perhaps the clue to this lies in the dictum of Thomson and Geddes, that the male element has always katabolic tendencies, while those of the female are anabolic. The hen tends to conserve energy, to store it up within herself, while the cock tends to dissipate it in such form as showy plumage, ornaments, pugnacity and song.

[The above interesting contribution only came to hand just on going to press, but one or two cases may be hurriedly cited. In my garden-aviary were pairs of Grey and Pope Cardinals. The Popes were a pair of vigorous birds, as was also the female Grey, but the male, though in fine plumage, was always somewhat lacking in vigour; last September the female Pope died, and early this year the male Pope courted and succeeded in winning and retaining the female Grey. I may add that the male Grey still occupies the same aviary, and the three birds live together in fair amity, though at times the male Grey gets a little chased about, both by his late wife and the male Pope; this only occurs when he gets into close proximity of either of them. In my own aviary (and I think this is the general experience) the female Black-headed Gouldian Finch will have nothing to do with a male Black-head if an unmated Red-head be available, and if he should be mated my experience is she will fight for him, and she will have to be removed if successful breeding is to result: separated and out of sight of the Red-head, she duly paired with the hitherto despised Black-head.—Ed.]

Editorial.

STRAY NOTES, ETC.

Nesting of Aurora Finches: A brood of Aurora Finches has been hatched in the aviaries of Mr. R. Suggitt. Unfortunately, owing to some unknown cause, the young birds died when fifteen days old. As the old birds are healthy and building again, it is to be hoped that complete success will attend their second effort.

Hybrid Cardinals: Mr. Aronstein has had a clutch of two eggs from Grey x Pope Cardinals, which duly hatched out, but the old birds would not feed. Unfortunately this is the usual result with all the Cardinals in mixed series.

Abnormal Yellow-rumped Finch: Messrs. Payne and Wallace have just sent me an abnormally-plumaged Yellow-rumped Finch (*Munia flaviprymna*). The bird, which appears to be an adult, has the whole of the under surface of body, except the vental region, but little lighter than that of the upper surface, which is typical; the whole of the head is a sort of leaden-grey; the rump and upper tail-coverts, which in typical specimens are straw-yellow, are deep refulgent golden-chestnut; tail feathers, deep ruddy-brown. The above is inserted in the hope that if any of our members possess abnormally plumaged specimens, they will give an account of same. I shall hope to make further comments when the bird has been longer under observation.

Delicacy of Firefinches: On another page will be found Mr. Fillmer's interesting communication on the "Delicacy of Firefinches," called forth by Mr. Teschemaker's humane sentiments in "Nesting Notes" in our April issue. I have many records by me from various correspondents, who have found Cordon Bleus, Firefinches and Pintail Nonpareils hardy when kept in an out-door aviary all the year round (one such record will appear in July issue), and from aviculturists living in the far north as well as from those in the south. Personally I have never kept either of the species named, because of the numbers that perish before a few healthy pairs are acclimatised, and I am of the strong opinion that, under these circumstances, unless they can either be imported privately, or under different conditions than exist at present, aviculturists should deny themselves the pleasure of seeing these avian gems adorn their aviaries and cages.

Small Birds' House at the Zoo: With this issue appears an illustration of the interior of the New Bird House, now definitely named Small Birds' House. While many cages are still unoccupied there are many handsome and interesting birds among its inmates, which include good series of Tanagers and the genus *Spermophila*. Readers are referred to Mr. Goodchild's article, "The New Bird House," in our April issue.

Humming-Birds at the Zoo: Captain Pam, associated with his brother, Mr. H. Pam, has successfully imported and presented to the Zoological Society twenty Humming Birds, consisting of the following species:—*Amazilia feliciæ*, Ruby-crests (*Chrysolampis moschitus*), Blue-chinned Sapphires (*Eucephala cœrula*), Œnone Humming Bird (*Chrysoronia œnone*), and Prevost's Humming Birds (*Lampornis prevosti*). They arrived on Monday, May 25th. On the following Saturday when saw them there were but twelve or thirteen left, and the impression felt was that very few of them would be alive a week hence. They were in a somewhat gummy condition, rendering it difficult to realise their extreme beauty; the rich hues of their plumage, however, appeared to be very largely due to light refraction. Readers are referred to Mr. Goodchild's drawing and notes in this issue.

Avocets : Quite an interesting if not unique event is the nesting (in the Waders' Aviary) of a pair of Avocets, which are engaged in incubation, with every appearance of successfully hatching out.

The Night Parrot : One of the most interesting of recent additions to the Zoo. collection is a Night-Parrot, which has been deposited by the Hon. Walter Rothschild. It is distinguished by three names, viz: Kakapoo, Owl-Parrot, and Night-Parrot, *Stringops habroptilus*. It has not been represented at the Zoo. Gardens since 1875, it was on view in 1870 for the first time. It is nocturnal in its habits, coming out after dusk to seek its food, which consists of fruit, seeds, grass etc. Its plumage is brown, much mottled with green, and while thus protected by its resemblance to its surroundings, it is incapable of flight, and promises soon to become extinct before the onward march of civilization.

Rare Birds: From the current issue of the *Avicultural Magazine* we learn that Mr. Walter Goodfellow has just arrived with one of the most remarkable collections of birds ever brought to this country. These are now housed in Mrs. Johnstone's aviaries at Groombridge and consist of Twelve-wired Bird of Paradise, *Selucides alba*; Red Bird of Paradise, *Paradisea rubra*; King Bird of Paradise, *Cicinnurus regius*, several pairs of which have been successfully imported, the females have never before reached this country alive; the Great Black Cockatoo, *Microglossa aterrimus*. The series also includes some rare Lories and Lorikeets, among which *Eos fuscata*, *E. cyanogenys* and *E. semilarvata* probably reach this country for the first time as living specimens.

An Improved Insectivorous Food : Messrs. Trower and Co. have sent me a sample of their "Improved Cecto," a high-class food, at the low price of 1/- per pound; its principal ingredients being ants' cocoons, dried flies, and preserved yolk of egg, all of good quality. For those of our readers who still use egg in their food mixtures, this is one of the best preparations on the market. Messrs. Trower put it up both with and without egg. Without egg it is a wholesome food, and can be used with confidence for all classes of insectivorous birds.

Reviews.

Birds I Have Known. By Arthur H. Beavan. Cr. 8vo., cloth, cheap edition 2/-. *Fisher Unwin*, 1907.

The opening paragraph of this book runs as follows:—

"I have always loved birds, and am told that, in ages past, I must have been one. But I don't believe in the transmigration of souls, nor in the theory that birds were at one time reptiles and have developed themselves into their present higher form of life. I am content to accept the unquestioning creed of my little son, who maintains that 'As the Bible says God on the fifth day created every winged fowl after their kind, it is no use saying that He *didn't!*'"

It is not to be supposed that many will disagree with the author in his disbelief in the transmigration of souls, but from the text of the extract here given it will be evident that any hopes on the part of the reader for instruction in either biological or morphological science will indeed be vain. And if he indulges in any extravagant anticipation of coming stores of fresh field natural history lore, he will be equally disappointed—unless indeed he be tempted to join Mr. Beavan in his one time inclination "to adopt old Gilbert White's theory that Swallows sometimes remain in England to hibernate." We will give our author's own account of the circumstance which led up to this peculiar mental reversion.

"One sunny January morning I was standing near an outhouse waiting for a friend to go shooting with me, when some sparrows emerged from their snuggery in the thatch and flew away, followed by three housemartins from out the eaves. Three more soon appeared, and I fired and missed them ; but I had a good view of them and saw that they were *not benumbed as if from long repose or scanty food*, [the italics are ours], but lively and strong on the wing. The *Times* recorded the fact a couple of days later, but the editor sarcastically enquired why I had shot at them, forgetting that, in the interests of ornithology, I was anxious to prove that they *were* swallows —swallows in the month of January in Cornwall, while snow was lying on the ground in London!"

For our own part we feel "inclined" to go one better than the Editor of the *Times*, and to ask why

Mr. Beavan should have thought it necessary to say anything about it at all.

His gunning practice, we are pleased to find, was not always as bad as the above, (he seems to have been scarcely ever without this implement)—for we read of how "many a time" our lover of birds used to sail up to a rock and fire into a group of penguins, and then at the risk of his life jump ashore and hurriedly seize his prey with the boat painter still in his hand. On the River Plate he also had good sport with duck and teal by "letting fly into the thick of them." He used "often to fill a sack with them" in the subsequent practice on the circling birds. We also find an interesting account of the shooting of three gallinázas, the latter two of which were "peering first at the dear departed and then inquiringly at me." In fact the book so abounds with such reminiscences that in our opinion its title might well have been "Birds That Have Met Me."

The book is profusely illustrated, the frontispiece being a reproduction of Wolff's delightful drawing of Golden Eagles and their young. As to some of the rest we can only express surprise that money should have been spent in their resuscitation.

The Birds of the British Islands. By Charles Stonham, C.M.G., F.R.C.S., F.Z.S., with illustrations by L. M. Medland. Part V. Roy. Quarto, 7/6. *Grant Richards.*

To review some books is a tribulation of the spirit and a weariness of the flesh: to sit down to the consideration of Mr. Stonham's classic is a pleasure and a joy, whether one regards its literary polish, its ornithological accuracy, or its artistic beauties. With respect to the first it stands out in sharp contrast with what we are only too often doomed to endure at the hands of some writers upon birds; with regard to the second there is nothing included but what the author's scientific mind *knows* to be correct; while as to the illustrations, these, as we have said before, simply mark a new departure in the art of black and white.

This part figures the Swallow, Martin, Sand-martin, Greenfinch, Hawfinch, Goldfinch, Siskin, Sparrow, Tree Sparrow, Chaffinch, Brambling, Linnet, the two Redpolls, the Twite, and the Bullfinch, this last being a particularly charming plate.

Mr. Stonham gives some exceedingly valuable information regarding the insectivorous habits of what are generally, but erroneously, regarded as purely seed eating birds.

Correspondence.

THE DELICACY OF FIREFINCHES.

SIR,—In his interesting "Nesting Notes for 1906," which appear in your issue for April, Mr. Teschemaker dwells upon the delicacy of Firefinches and Cordon Bleus, and expresses the opinion that these species, and also Lavender Finches and Pintailed Nonpareils, ought not to be imported because of the large proportion which die during or shortly after importation. Of the fact of the mortality there can be no doubt, and I have full sympathy with Mr. Teschemaker's wish that an importation which results in such a high death-rate should be discouraged. But I think that deaths are largely preventable, and are by no means directly attributable to change of climate. Dr. Hopkinson brought home from the Gambia, in considerable numbers, Fire-finches of various species, and his examples appear to be on the whole, neither more nor less liable to succumb to the change of climate than other Waxbills. Last summer he kindly presented me with two, a Spotted Firefinch and a

Vinacious Firefinch, which had only been in England a few days. They were then healthy, though not very robust, and in a few weeks they became perfectly strong and in fine plumage. I kept them through the winter in an unheated bird-room, and they are still alive and well. Of course, little or nothing can be deducted from the story of two examples, but I know that very many other of the Firefinches privately imported by Dr. Hopkinson have lived a long time in this country, and a good many have been seen on the Show bench.

May we not fairly draw the inference that the frightful rate of mortality among the Firefinches imported by dealers is due rather to the insanitary conditions in which they are kept on the voyage and after their arrival in this country, than to any inherent inability to withstand the change of climate; and that their delicacy consists not so much in a want of ability to resist cold or to adapt themselves to a captive existence in these Islands, as in a want of power to resist the attack of an infectious and preventable disease?

And if this is true in the case of the Firefinches, which are the standing "awful examples" of "delicacy," is it not likely to be true also of the Cordon Bleu, the Lavender Finch and the Pintailed Nonpareil? HORATIO R. FILLMER.

CHAFFINCH MIMICRY.

SIR,—I have in my outside aviary a cock Chaffinch and two hen Greenfinches. These were turned out in the early spring together with a cock Greenfinch and a hen Canary, both of which came to an untimely end. Recently we had been much puzzled by a peculiar song apparently coming from the aviary, which began with several short notes something like a Chaffinch's note, but then abruptly ended with a long Greenfinch trill. At first I thought it must be a Greenfinch in the neighbouring shrubs, or else that one of the hen Greenfinches was singing, in either case a song much modified from the ordinary. The Chaffinch sang at intervals clearly and and well. To-day I solved the problem from the end of the garden with the aid of a pair of field glasses. It was Mr. Chaffinch all the while, for at times he sang his own notes and then he would do the Greenfinch modification. It would be interesting to know if other readers have heard such a case of mimicing by the Chaffinch, for in my experience it sticks to its short song with marked absence of any variation.

SIDNEY H. SNELL.

Post Mortem Reports.

(*Vide Rules*).

MANY-COLOUR PARRAKEET, hen. (J. N. Wilson, Bitterne). The breast of bird was sharp, indicating that it had been suffering some days. Death was due to acute septicæmia associated with pneumonia, induced by a chill while suffering from the infection. Birds travelling during wet chilly weather are very liable to this.

CRIMSON FINCH, hen. (Mrs. Miller). Double pneumonia, due no doubt to a chill causing septicæmia, during the changeable and wet weather we have been experiencing of late, was the cause of death.

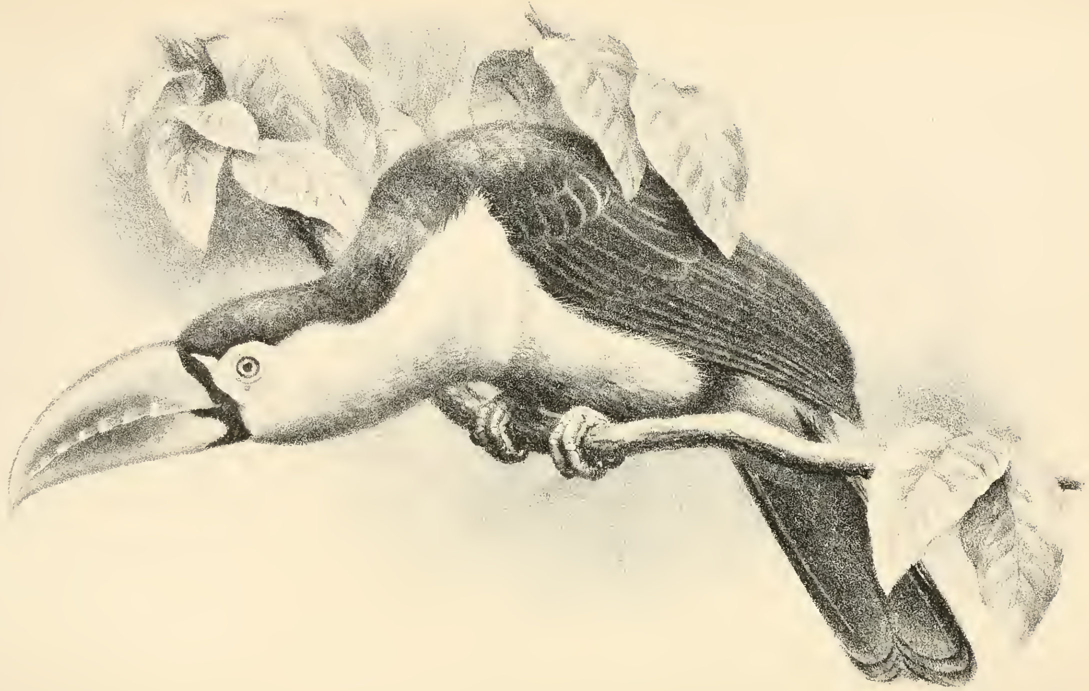
VIOLET TANAGER, cock. (Mrs. Warren Vernon). Death was due to septicæmia, arising from the dirty condition these birds are kept in during transit, and the time they are at the bird-dealer's shop, especially during wet chilly weather.

CRESTED CANARY, hen. (Miss M. Lock). Death was due to inflammation of the oviduct, produced by a broken egg contained in the duct. The bird was very fat. You did not say whether force had been used to free her from the egg. The common cause of egg-binding is cold, wet, or changeable weather.

CAPE CANARY, hen. (W. E. Teschemaker). This bird on arrival was eaten up with maggots, so much so it was impossible to make a correct *post mortem* examination.

MADAGASCAR WEAVER, cock. (Chas. W. Perryman). Death was due to acute pneumonia and enteritis resulting from septicæmia. African millet, French millet, and canary seed are sufficient for such birds. The changeable weather we are now experiencing is a fruitful predisposing cause of disease in birds, especially if they are exposed to draughts.

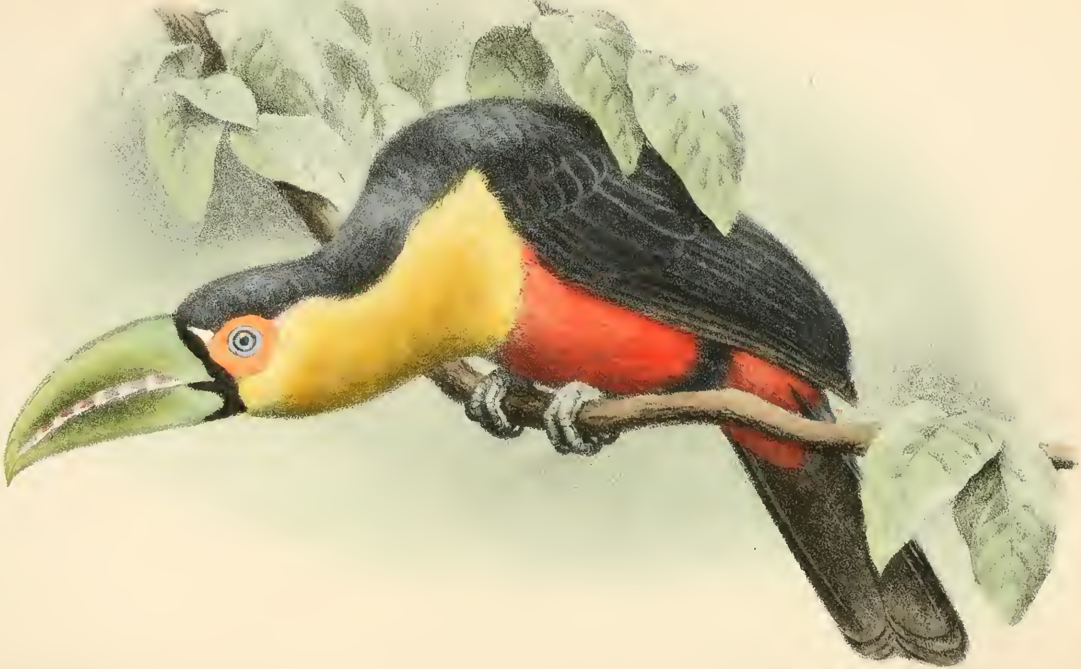
HENRY GRAY.



H Goodchild del et lith

A.S Huth imp

GREEN BILLED TOUCAN.



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GREEN BILLED TOUCAN.

Ramphastos dicolorus.

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BIRD NOTES:

THE JOURNAL OF

THE FOREIGN BIRD CLUB.

The Green-billed Toucan.

Ramphastos dicolorus. Linn.

By S. M. Townsend.

A little more than two years ago, a dealer told me that he was expecting some rare Toucans, consequently I called on him several times, but all to no purpose. I used to look in and say, "Have the Toucans come yet?" and always got the same answer, "Not yet, but I expect them in a day or two." At last, one day when I had nearly given them up, he met me with the remark, "Didn't you see them?" and taking me outside the shop he showed me, in a dirty box, about 2ft. square, with a piece of wire netting across the front, five Green-billed Toucans in very fine condition, but packed like sardines. After a great deal of haggling, in which I came off second best, I became the possessor of one of them. I afterwards heard that the other four were bought by some one who was over at that time buying largely for a New York Zoo.

It was on a Thursday that I bought it, plump, and looking as healthy as possible. By the following Monday it had become so ill that if I had been asked to insure its life, I would not have risked a shilling on it. I had kept a Green-billed Toucan* before and had done very well with it, and also one of the smaller Toucans, the latter I still have, and I started feeding and managing this one on the same lines, but he did not take to the food at all ; he used to throw it out all over the place and ate next door to nothing. I tried several different things to tempt his appetite, but he would have nothing to do with any of them, and by Monday evening he had become so very thin and weak that I was quite surprised to find him alive on Tuesday morning. I caught him then, and as a last resource filled his beak with crushed mealworms, he was so far gone that he made no resistance when I opened his beak to put them in. He had taken no notice of the mealworms I had offered him previously but when he tasted the crushed ones he seemed to like them and after a little trouble swallowed them. I then started off to the dealer to ask if he had noticed what food they had in their cage when he bought them, and he told me they had been brought over solely on boiled rice and potato ; so I tried him with these and he soon picked up, but he much prefers the food now, and though I still give him rice boiled with currants, he does not eat very much of it, though he picks out all the currants. He is very fond of fruit, particularly grapes or cherries, and unlike most birds prefers his banana not too ripe. I have found in this and several of my other experiences, that it is always wiser to try and find out what food newly imported birds have been brought over on, and to let them have it at first, even if some of the ingredients are what *you* believe to be injurious, and to take it away from them gradually, as some birds do not take to a fresh food readily and it is decidedly against a bird's chances to be on short commons after the hardships of importation.

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* At least I bought it as a Green-billed Toucan, but it was very different to the present one; the underparts being entirely black, the bib only one shade of yellow, and the bill was tipped with red.

My Toucan is a bird of distinct moods; when he sees me with some raw meat he gets very excited, and one day he will eat it with relish and ask for more, another he will simply take it and throw it down, and the same with the mealworms.

I have noticed that he sometimes uses his claws like a bird of prey, when he gets hold of anything too big to swallow, or if by chance he gets a piece of banana skin, he holds it on his perch with both feet and nibbles at the inside with much relish.

His voice is rather like a donkey's bray, and when a stranger is in the room, he uses it to such purpose that you can hardly hear yourself speak; and in the summer time he occasionally starts shouting before 4 o'clock in the morning, so my neighbours must be longsuffering!

Another of his peculiarities is about his bathing. He is very fond of a bath when he wants one, but if he does not fancy it, no amount of syringing or coaxing will make him take it. You may give him one several days running without his taking any notice of it, and perhaps if you do not put it in one day he simply demands it; he tears up anything he can get hold of, and throws his food pots about, and there is no peace till he gets it, and it is a bath, too, when he has got it; he does not leave a dry feather or a dry spot in the room.

He is very tame and will let you do almost anything with him, and is very fond of being stroked, and though sometimes he will make a funny chattering noise as if he were very annoyed at being touched he never attempts to move away, and will stand still as long as you like to pet him. Sometimes, if I am in a hurry and take his water pot out without taking any notice of him, he will seize my finger, looking so angry as though he were going to bite it off, and sometimes he will make believe to be in a great rage and slash at my hand with his long beak, rather like an energetic barber's assistant stropping a razor, with more vigour than method; it is a little alarming till one gets used to it and knows it is all make-believe, as he is most affectionate and gentle, and never hurts you at all.

As I live in London I have never had an opportunity of trying it, but I cannot imagine a bird better adapted than a Toucan for running loose in a garden, in the same way as some people keep a Jackdaw; though of course it would have to be sheltered at night. It is a bird that has some very engaging ways in a cage; and I am sure, in comparative liberty, would develop many comic tricks.

I should be very sorry to be without a Toucan of some kind as they are very interesting birds; but they are certainly not fit for the drawing room as some writers would have us believe.

Its plumage is varied and beautiful, and is briefly as follows: back, tail, wing and top of head, black; red underparts; pale canary bib with darker orange in the centre; naked part round eye, brick red, with blue circle round eye; beak, bluey green, with slight red marking down middle and black at the base; rump, red; feet, bluey grey.

[The following is an original description by H. Goodchild of a specimen recently arrived at the Zoo, and which appears to be rather more brilliant in plumage than the specimen described above. Ed.]

Top of the head, back of neck and the whole of the upper surface, excepting upper tail coverts, glossy black. Part of flanks under the wings, tarsal plumes, and a band across the abdomen, also black. Tail black. Lower surface, upper and under tail coverts, vermillion. A patch including throat, cheeks and breast, lemon yellow, deepening into an orange-yellow patch on the lower portion of this light area (*i.e.* across the pectoral region and lower throat). Naked skin round eye, orange. Eyes, blue. Bill, green, with a black band at base. Total length about 18 inches. Bill, 3·5 inches; wing, 7·5 inches; tail, six inches; tarsus, 2 inches. H. GOODCHILD, M.B.O.U.

Toucans.

(*Rhamphastidæ*).

BY WESLEY T. PAGE, F.Z.S.

The majority of bird lovers are only acquainted with these interesting and beautiful birds by stuffed specimens (very much of the beauteous colouring of the beak fades after death) in museums, and stray specimens in Zoological Gardens. Though, as Mr. Townsend says, in his account of the Green-billed Toucan in this issue, "they are not drawing-room pets," yet they improve upon acquaintance, and in a bird room are really interesting and chummy fellows.

Mr. Walter Goodfellow so delightfully describes his experience with these birds in their native wilds, in his "Naturalist's Notes in Ecuador" (*Avic. Mag.*, Vol. VI.), that I cannot refrain from quoting part of them here.

> "As the sun rose, multitudes of beautiful birds came forth from every "tree and bush, and were shaking the dew from their feathers and drying

"themselves in the sunshine. Humming-birds darted across the path or "hovered over the bushes sipping the honey from the flowers; little Grey "Doves ran along the path, and then six large birds flew, one behind the "other, from the top of a high tree on the opposite side of the valley, and "flew into another tree just over our heads. Yes! they were Toucans, there was "no mistaking them with their long bills pointing downwards. In a cage, "one thinks of them as clumsy, but there was no clumsiness in that graceful "ful flight across the valley, and at the same time it was unlike that of "any other birds. How I feasted my eyes on them as they gambolled "among the branches of the great tree above us. I say gambolled, for that "is what they were doing, chasing each other from branch to branch, and "snapping their beaks and making a peculiar rattling noise in their "throats. One would throw a fruit into the air, and before it could catch it "again, another would seize it without any intention of swallowing it, but "pass it on like boys would a ball. I have never seen any birds play together "gether like a number of Toucans will, and on many occasions since I have "watched them doing the same thing"

"These birds are high fliers. The wing looks particularly small when "flying and the bills very conspicuous. They go in small flocks straggling "one behind the other, the older birds, judging by the length of bill, taking "the lead."

From the same writer I gather the following facts:

They are not early risers, and are seen about when it is nearly dark.

The genus *Rhamphastos* inhabit the highest trees, and are never seen on the ground.

The genus *Pteroglossus* frequents more open spaces, sometimes banana plantations round human habitations.

The little Green Toucans (*Aulacorhampus*) may be said to live among the undergrowths of the forest. This genus appears to be solitary, and is not observed together even in pairs.

Mr. Goodfellow found no evidence that they eat the eggs and young of other birds; a tree near his hut, the constant resort of Toucans, was also the habitation of many small birds, and they never seemed in the least alarmed at the Toucans. Further Mr. Goodfellow says:—

"My old Sulphur-breasted Toucan was never a sinner in this way. His "aviary was ouly divided off from the aviary of the smaller fruit-eating "birds by wire netting; they were constantly clinging to the wire, and had "he been so minded, nothing would have been easier than for him to have "pulled them through, but far from doing that, he used to pick out all the "choicest morsels from his food pan and feed them through the meshes. "I am certain one Bulbul relied solely on him for all the food it ate, and I "never saw it feed from the pan itself. Often still smaller birds got into the "aviary with the Toucan, and whenever they did so he would offer them "food. On the other side of him were the Parrakeets, and he was just as "attentive to them, especially to a female Bulla Bulla."

Their nests are placed very high.

Mr. Goodfellow remarks in closing, that in a country garden they could be given their liberty without fear of their straying away when once they knew the place. He states that the Indians of Eastern Ecuador kept various kinds of Toucans which were given full liberty in the forests round their huts. It was remarkable how quickly they came flying back to the huts on the slightest call from the Indians or when they saw cooking going on.

According to Mr. Osbaldeston who has kept ten species of these quaint and interesting birds, giving his experience in the *Avicultural Magazine*, Vol. V., when once moulted in a good sized cage or aviary, and fed upon a suitable diet, they become very ornamental and desirable birds. His diet was a mixture composed of yolk of egg*, ants' eggs, grocers' currants, various seeds ground down, mixed with pea meal, put into a warm oven with syrup; adding beef dripping to this mixture as required for use. They also get soaked currants, grapes, bananas cut up fine, apples and pears. Mealworms they took readily from the hand.

Mr. Osbaldeston prefers the larger species, as being more brilliantly coloured, more docile and attached to their keepers.

Dr. Sclater (Cat., Brit. Mus., Vol. XIX.) recognises five genera, containing in all fifty-nine species of these, only a few can be mentioned in this paper.

RHAMPHASTOS (14) *toco, carinatus, brevicarinatus. tocard, ambiguus, erythrorhynchus, inca, cuvieri, culminatus, citriolæmus, osculæus, ariel, vitllinus, dicolorus.*

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* The yolk of egg would be better left out.

ANDIGENA (6) *hypoglaucus, cucullatus, laminirostris, nigrirostris, spilorhynchus, bailloni.*

PTEROGLOSSUS (18) *aracari, weidi, formosus, pluricinctus, castaotis, torquatus, frantzii, erythropygius, sanguineus, bitorquatus, sturmi, flavirostris, azaræ, humboldti, inscriptus, viridus, didymus, beauharnaisi.*

SELENIDEREA (7) *maculirostris, gouldi, langsdorffi, reinwardtii, natteri, piperivora, spectabilis.*

AULACORAMPUS (14) *sulcatus, erthrognathus, calornhynchus, derbianus, whitelyanus, prasinus, wagleri, albivittatus, hæmatopygius, cæruleicinctus, cæruleigularis, cyanolæmus, atrogularis, dimidiatus.*

RHAMPHASTOS.

In this genus are gathered together the largest and strongest species of the Fam. *Rhamphastidæ.* They are mostly various arrangements of black, white, scarlet and orange.

Their range is from S. Mexico to N. Argentina, being most numerous in the wood-regions of Amazonia.

In this genus the plumage of the females is similar to that of the males.

THE SULPHUR-BREASTED TOUCAN.

Rhamphastos tocard.

This fine and brilliant species is one of the largest of the Toucans. Its rich black plumage is varied with sulphur-yellow breast, bordered with cream and red; upper tail coverts, white; under tail coverts, red; bare skin round eyes, yellowish green; eyes, pale blue; bill serrated, the upper mandible is mostly yellowish-green, with a little blue down the centre, its lower half is black; the lower mandible is entirely black.

Total length 2ft., bill 6¼in., tail 7in.

"Hab.: Nicaragua, Costa Rica, Panama and Western Ecuador."
(B.M.C., Vol. XIX.)

Toco Toucan.

Rhamphastos toco.

This species is black, with rump, throat, and fore-neck, white,—the latter bordered with red; vent, crimson; eyes, blue; bill, shaded orange, blotched terminally with black. The bill of this species has been aptly likened to a lobster's claw.

"Hab.: Guiana, L. Amazonia, Brazil, Bolivia, Paraquay, and N. Argentina." (B.M.C., Vol. XIX.)

R. carinatus.

Rump, white; throat and breast, clear yellow with a narrow scarlet border; ventral region, scarlet; bill dark, with a large yellow patch on the upper mandible, tip red. Total length 1¾ft., bill 5⅞in., tail 6⅞in.

"Hab. S. Mexico, Yucatan, Guatemala, Honduras, and Nicaragua." (B. M. C., Vol. XIX.).

Space does not permit a description of the remaining species of this genus. It must suffice to say that they are chiefly black and white, their respective distinctive characters being mostly variations of yellow, orange, and scarlet, in rump, throat, breast, lower abdomen and bill; and a little variation in size of body and bill.

ANDIGENA.

This genus is more heavily plumaged than any of the Toucans, is found at the highest altitude, and would appear to be well able to withstand the vagaries of our English climate, or rather weather. They are mostly found amid the high forests of the Andes. The general colour of their plumage is blue-grey, excepting *A. bailloni* which is mostly olive-green. The sexes are alike.

Andigena laminirostris.

Prevailing colour, mauve-blue, which is lighter and richer in hue round the neck; head and nape, glossy black; wings and back, bright chestnut-brown; rump, primrose yellow; flanks, orange; vent and thighs, chestnut; tail, slaty blue, tipped with pale olive; bill, black, merging into bright red at the base, with a square white basal plate on each side of the maxilla. Total length 17¾in., bill 3½in., tail 6½in.

A. hypoglaucus. Upper surface, dark green; rump, yellow; thighs, chestnut; ventral region, scarlet; top of head, black; bill, mostly yellow, with the culmen and part of sides of upper mandible red, with a broad black band near the base, which is also the colour of the end of the lower mandible. Total length 17½in., bill 4in., tail 7in.

A. nigrirostris. Upper surface, olive with a brownish sheen; top of head and nape, black; throat, white; underparts, pale blue; thighs, chestnut; ventral region, scarlet; bill, black. Total length 17in.

A. spilorhynchus. May be distinguished from *nigrirostris* by a red patch at base of mandibles, more suffused with the black on the upper mandible.

A. cucullatus. Upper surface, green, washed with brown; top of head, black; ventral region, scarlet; thighs, brown; other parts, bluish grey; bill, yellow, strongly suffused with green, black at the tip and also at base of lower mandible. Total length 15½in., bill, 3in., tail 6½in.

PTEROGLOSSUS.

This genus is the most brilliant and varied of the *Rhamphastidæ*, mostly with beautifully varied plumages of green, scarlet, yellow and orange. Their range is similar to that of *Rhamphastos*, but does not extend so far south. The sexes are similar as to plumage, but some of the species have the plumage of the females much duller than the male, thus making the sexes easily determinable (that is providing the specimens are adult).

Their beaks are very variable and brilliant in the respective species ranging from 3 to 4½in.

Their total length varies from 12½ to 17in., the majority averaging 13in. Only one species described.

P. erythropygia.

Head, neck, and throat, rich glossy black; wings, olive green with the primaries brown; tail, olive green, much lighter on the underside; breast, rich yellow, much flecked with red, and crossed with a band of black, also flecked with red; thighs, chestnut; rump, scarlet; bill, creamy, yellow at the tip, red at base and black along the edge of upper mandible; the lower mandible is blackish at the tip; bare skin round eyes, red shaded with blue; iris, pale yellow, pupil dark green; legs and feet, olive. Total length 16in., bill 4in., tail 6½in.

"This species varies much as to plumage and in the size of their bills, in both sexes."—*W. Goodfellow.*

SELENIDEREA.

This genus is of slighter build than *Pteroglossus*, and all the species are strikingly similar as to plumage, but may be readily distinguished by the marked dissimilarity of their strangely marked bills.

Their total length varies from 12½in. to 14in.; that of bill ranging from 2½in. to 3½in.

Their range is (according to B.M.C.) confined to the forests of Guiana, Amazonia, and S.E. Brazil, with the exception of *spectabilis*, which is met with north of Panama. One species only is described.

S. maculirostris.

"Above, dark green; cap. black, bordered by a pale yellow band on the "nape; tail-end, chestnut; broad postocular stripe, orange; beneath, from "chin to middle of belly, black; lower belly, greenish; flanks, orange; "thighs, brown; crissum, scarlet; bill, milky-white with several broad "transverse blotches on the upper mandible. Whole length 13 inches, "wing 5·2, tail 4·5, bill from gape 2·5. Female similar, but cap and body "beneath chestnut instead of black. Hab. South-Eastern Brazil." (B.M.C., Vol. XIX.)

AULACORHAMPUS.

This is a genus in which the plumage is mostly bright green, and (according to B.M.C. are found over a large area, ranging from Mexico, through Central and Southern America into S. Amazonia. There is no external distinction in the sexes. Two species are described.

A. sulcatus.

"Above uniform green; eye region blue; beneath brighter; throat "greyish white; bill much sulcated on both mandibles, black; basal por-"tion of upper mandible red. Whole length 14in., wing 5in., tail 4·8in., "bill 3in." Hab.: Venzuela. (B.M.C., Vol. XIX.)

THE GREEN TOUCAN.

Aulacoramphus hæmatopygius.

This is a small and beautiful species. Practically the whole of the plumage of this bird is various shades of rich green, washed with pale blue on the breast, and also at the base of the bill; rump, crimson; tips of tail feathers, chestnut; skin round the eyes, red; bill, dark red, shaded with black, and a white line at the base, this line is much wider on the lower mandible. Total length 15in., bill 4¼in., tail 5in.

This species is very variable as to size, ranging from 13in. to 15in.

This is a most interesting family, most of the species of which become very tame and friendly, and will readily take food from the hand. They also become quite adept at catching mealworms and small fruits thrown to them from some distance. I was much interested in these birds, and closely studied them while they lived in the Western Aviary, and though only a weekly or fortnightly visitor, I persuaded myself that one or two of them recognised me. I hope soon to add some of the *Rhamphastos* to my avian pets. Space has prohibited in this paper entering into full descriptions, but I hope to deal with some of those more frequently imported in a later issue.

Pneumonia and Septicæmia.

By W. Geo. Creswell, M.D.

The Editor has asked me to write a few remarks in answer to the queries on this subject which appear this month in the Correspondence columns. These open up rather a wide question, and one which it is naturally difficult for laymen to properly appreciate, but I will endeavour in a few words to make plain the salient points. In so doing it will be necessary to make cross references to the questions submitted.

Pneumonia — *i.e.* inflammation of the lungs—is itself a septicæmia, inasmuch as it is the immediate result of the presence of a micro-organism of the septic group, and of the toxins (poisons) thrown out by the same. It may occur as a primary disease, as in the typical form so commonly found in human beings, where an entire lobe of either one or both lungs is affected, and where in fairly resistant subjects a recovery may more or less be expected. Or it may be found as a part of a more extensive septicæmia, as is well known both to practitioners of human and veterinary medicine. In this latter case it is manifestly of an even more virulent and fatal nature than in the former, since not only is a larger area of the lungs usually invaded, but the vital powers of the patient are necessarily overwhelmed by the general blood poisoning.

In the older days of medicine, those anterior to the understanding of the important part played by micro-organisms in the production of disease, pneumonia was said to be caused by chill alone. It was supposed that the sudden deprivation of the surface blood vessels of their blood, through the constricting effects of cold, caused an immediate rush of blood to the inward parts, and that this state of affairs itself constituted the inflammation. Then came the era of bacteriological discoveries, and this theory was discarded by reason of the new-found knowledge of the universal association of certain bacteria with the disease. But with the very proper discarding of this theory of the *manner* of the production of pneumonia there arose in many minds, medical as well as lay, an unfortunate disassociation of chill as a factor in its causation. As a matter of fact chill often has a good deal to do with the causation not only of pneumonia but a good many other diseases of which the immediate cause is a microbe. Pathogenetic organisms, *i.e.* those which produce disease, are always with us in a more or less virulent condition. For instance that of pneumonia has been over and over again isolated from the mouth secretions of persons who are manifestly suffering from no disease at all. Why then are such persons not suffering from pneumonia, seeing that both their stomachs and their lungs are being constantly invaded by the pneumo-coccus? Simply because the more remote cause has not come into play, that is, the condition of lowered resistance which is necessary before the microbe can get the upper hand. Amongst the many causes of lowered resistance a sudden chill is perhaps the most frequent, especially when it comes on the top of some other factor, such as the alcoholic habit, impaired kidneys, the recent presence of some other disease, etc., etc. But even without these special helps it is often the determining cause of the contraction of various septicæmias by individuals who are only moderately resistant to the microbes.

The above remarks, scanty as they are, will, I hope, satisfactorily answer Mr. Harrison's first two questions. The answer to the third, asking for the correct remedy for pneumonia, is simple in the extreme. There is no remedy in the popular sense of a "remedy." In the case of human beings the most we can do is to carefully watch each symptom as it arises, each effect of the poison upon the heart and general system, and to meet such with carefully considered hypodermic doses of such drugs as strychnine, digitaline, etc., etc., with the inhalation of oxygen, and in a word with the adoption of such hygienic measures in general, as may seem helpful in maintaining the vitality of the patient over the crisis. And the careful treatment that I have thus sketchily outlined depends after all upon correct diagnosis and upon the fact that the very size and nakedness of the human body affords something in the way of material upon which to exercise one's powers of diagnosis and treatment. What then can be done in the case of a Waxbill? or even a Crow? Practically nothing beyond prevention, and this in its various forms has been dealt with in our previous volumes, even the *post mortem* reports affording many hints to a thoughtful reader.

Of course a bird which is obviously suffering from some acute disease or other should be put under conditions of warmth (not *heat*), pure air, and quietude, and should be furnished with digestible food. Drug treatment should be left alone. The only people who may be allowed to advise drugs are those who know little about them, less of the bodies they put them into, and nothing or even less than nothing of the natural history of the diseases affecting the bodies.

The Genus Spermophila.

By WESLEY T. PAGE, F.Z.S.

(Continued from page 92).

EULER'S FINCH.

5. *S. superciliaris.*

Adult male: The upper surface is olive-green, save for the following variations: median, greater, bastard wing, primary coverts and quills, dusky brown edged with olive; the greater and median-coverts are tipped with buffish white, forming a double wing bar; tail-feathers blackish brown edged with olive; crown of the head olive-green suffused with dusky; lores and eye-streak, yellowish-white; ear-coverts, olive streaked with whitish; cheeks, throat and under surface of body pale yellowish-white, almost pure white on the lower breast and abdomen; foreneck and chest as under surface, but suffused with ashy-grey; sides of body and flanks greyish-brown suffused with olive; beak, brownish: legs and feet, brown. Total length 5½ in., of which the tail measures 2½ in.

Adult female: Darker olive-green above than the male; her double wing-bars are ochraceous, and her under surface is more olive-yellow, the plumage generally is of a duller hue than that of the male.

" A young male which died in the Zoological Gardens had " the buff tips to the wing-coverts as in the old female, and " base of the forehead white." (B. M. C., Vol. XII.)

Habitat: Brazil.

6. *S. simplex.*

Adult male: The upper surface, including the top of the head, is palish olive-brown, suffused with ashy-grey; median and greater coverts, dusky edged with olive and tipped with white, forming a double wing-bar; the bastard wing, primary-coverts and quills, similar but without white tips; there is a small patch of white at the base of the primaries, formed by the whitish tips of the secondaries and the bases of the inner primaries; tail-feathers, brown edged with olive; lores and eye region, whitish; ear-coverts, greyish-brown; cheeks and under-surface, whitish-yellow, strongly suffused with greyish-brown on the foreneck and sides of body; beak, brownish; lower mandible much paler than the upper; legs and feet, leaden-brown. Total length 4⅝ in., tail 1¾ in.

According to Prof. Nation the sexes are alike.

According to Dr. Taczanowski the young differ from the adults in having a tinge of brownish on the upper parts, the same tint suffuses the under surface; the white wing-bands are less distinct and have a slightly ruddy tinge, the margins of the scapular plumes are also slightly ruddy.

Habitat: Peru.

7. *S. obscura.*

Adult male: General colour of upper surface, brown with a slightly olive tinge, and washed on the top of the head with ashy, wing-coverts, dusky-brown edged with lighter; quills, dusky-brown with ruddy margins; sides of face, greyish-brown with a whitish loral streak; cheeks, throat and under surface of body ashy-grey, whitish on the centre of breast and abdomen; flanks, lightly washed with olive; beak, the upper mandible is blackish, the lower much paler (pale horn); legs and feet, pale brown. Total length, 3⅞ in., tail 1½.

" Adult female: Similar to the male, but a little browner " grey; bill, brown, the upper mandible darker; legs and feet " flesh-colour; iris, wood-brown." (H. Durnford). " Habitat: " from Peru to the Western Argentine Republic." (B. M. C., Vol. XII.)

8. *S. pauper.*

Very similar to preceding but darker generally, the eye region being lighter.

" Adult male: General colour, above brown with an olive " tinge; lesser and median coverts, like the backs; greater " coverts, bastard wing, primary-coverts, and quills, dusky " brown edged with the same colour as the back; the greater " coverts and inner secondaries rather more reddish on the " margins; upper tail coverts, like the back; tail feathers,

“ brown edged with paler brown; crown of head, slightly more “ ashy than the back; lores and feathers round the eye, ashy “ whitish; ear-coverts, dull ashy brown; cheeks and throat, “ pale ashy; sides of neck like the head; fore neck and breast, “ dark ashy brown, washed with olive; abdomen, whitish; sides of body and flanks, olive-brown: thighs, olive-brown; under tail-coverts, pale fulvous; ‘iris, dark brown’ (J. Stolzmann). Total length, 3·5 inches; tail, 1·5 inches. “ Habitat: Ecuador to Peru.”

9. *S. talasco.*

The general colour of the upper surface is ashen-brown, mottled with darker (blackish) centres on the upper back; rump and upper tail-coverts more ashen and only slightly mottled, a white band across the lower rump; the lesser coverts as back with blackish bases; the remainder of the wing-coverts are blackish with light brown edges and much lighter at their ends; the inner primaries and secondaries have whitish margins, and are white at the base, forming a double wing-patch; tail-feathers, blackish with ashen margins and tips and white at their bases; crown of head dark ashen with minute dark streakings; nape, sienna-brown; a fine white line divides the cheeks from the throat, which is chestnut with a purplish sheen; sides of neck, light brown; remainder of under surface white, washed with sandy-brown on the breast, and streaked with blackish on the sides and flanks; beak, blackish; legs and feet ashen-brown. Total length 4 in., tail 1½ in.

According to the Museum Catalogue the adult male in winter plumage is much browner, with darker brown centres to feathers; the head is brown, and the light edges to the wing-coverts and quills broader and more hoary; the chestnut spot on the throat much obscured by sandy margins to the feathers.

The female is much browner than the male, lacks his chestnut throat and white rump-band; the under surface of body is tawny-buff.

Habitat: Peru to Ecuador.

10. *S. inornata.*

The adult male is bluish-grey above, mottled with blackish on the upper back, and only slightly so on the crown; median and greater coverts dusky-black, with outer webs bluish-grey, the latter have white tips; remainder of wing-coverts, quills and tail-feathers dusky-brown with ashen edges, the primaries edged with ashy-white; sides of face and under surface, pale ashen merging into white on the lower abdomen; beak, ruddy-brown; legs and feet, dark flesh-colour. Total length 5⅞ in., tail 2½ in.

Habitat: Bolivia and Ecuador.

11. *S. homochroa.*

The adult male is mostly deep slate-grey, slightly tinged with olive-brown on the under surface; forehead, lores, cheeks and ear-coverts, blackish; beak, yellowish; legs and feet, dark flesh-colour. Total length 4¾ in., tail 2 in.

The adult female is brown on the upper surface, streaked with darker; greater coverts tipped with tawny, other wing-coverts dark brown with lighter margins; tail-feathers, dark brown with ashen edges; the under parts are mostly lighter or darker olive-brown, almost whitish on the breast and abdomen.

Habitat: Peru and Ecuador.

12. *S. analis.*

Adult male: Upper surface, slaty-grey; median greater and primary wing-coverts, black edged with slate-grey; primaries are white at the base forming a largish wing-patch; quills, black with hoary margins; upper tail-coverts slaty-grey mottled with blackish; tail-feathers, black with ashy edges, and the outer ones tipped with white on the inner web, and a round spot midway up the inner web; front of head, lores, eye-region, chin, ear-coverts and cheeks, black, the two latter having the hind portions black; throat, sides of neck, and remainder of under surface, slate-grey; centre of breast and abdomen, white. Total length $4\frac{7}{8}$, tail 2 in.

The adult female differs from the male in being light brown above, streaked with blackish; lower back, rump and upper tail-coverts, greyish with narrow black streakings; lesser coverts, ashen; median-, greater-, and primary-coverts and quills, dark brown edged with light; primaries have white bases forming a white wing-patch; tail-feathers, brown, narrowly edged with paler brown and with a large patch of white about the middle of inner web; under surface, ashy-white with narrow black shaft streaks; sides and flanks, washed with ashen. Slightly larger than the male (?). It is unsafe to be definite on such a point from skins, as these frequently get stretched while being preserved.

13. *S. analoides.*

Adult male: Similar to *S. analis*, but has no white at the base of the primaries, these being margined with white; the black chin-patch is smaller, and the white of the under parts blurred with ashy. Total length 4½ in., tail 2 in.

The adult female only differs from the female of *S. analis* in having less white at the base of the primaries.

Habitat: Columbia, Ecuador, Peru and Bolivia.

17. *S. hypoxantha.*

Adult male: Upper surface, pale slate-grey; lower back and rump, light ruddy-cinnamon, tinged with ochreous; lesser coverts, ochreous-brown; greater and median coverts, dark brown edged with ochreous, with whitish ends to outer webs; primaries and quills, dark brown, with lighter edges, the primaries white at base of outer web, forming a white wing-patch; upper tail-coverts, slate-grey; tail-feathers, blackish, edged with ashen and tipped with brownish-white; crown, slate-grey; sides of face, ear-coverts and under surface of body, rich ruddy-cinnamon; beak, blackish; legs and feet, brown. Total length 3¾ in., tail 1½ in.

The adult female is olive-brown above, tinged wih rufous on the lower back and rump; small white wing-patch at base of primaries; wing-coverts and tail-feathers, dark brown edged with olive, the latter having whitish tips; under surface, pale yellowish-buff, darker in the centre of the body and browner on the sides and flanks; under tail-coverts, tinged with rufous.

Habitat: Brazil.

THE MARSH FINCH.

17. *S. palustris.*

Adult male: The head and back are clear bluish grey; the under surface to middle of breast is pure white, which is also the colour of the sides of the neck and ear-coverts; remainder of under surface, rump and upper tail-coverts, ruddy-chestnut; wings and tail, blackish brown edged with whitish; inner secondaries black, tipped and broadly edged with white; base of primaries, white; beak, legs and feet, black. Total length 4½ in., tail 1¾ in.

The adult female resembles the male as to wings and tail, but lacks the lustre of the male. She is greenish-olive above, lightly streaked with earthy-brown; below, light buff with a yellowish tinge.

Habitat: Argentina.

THE REDDISH FINCH.

18. *S. nigroaurantia.*

This small and pretty species is one of the most pleasing if not the most handsome of the *Spermophilæ.* It is a sweet singer, but the song is not very sustained. It is amiable and ought to be in every collection of small birds. Unfortunately all this genus, with one or two exceptions, are rare, probably because they are not often asked for, their attractive qualities not being entirely on the surface.

Adult male: Its principal colour is cinnamon, with a sandy tinge; top of head, black; wing-feathers blackish, edged with ashy, ruddy-grey and whitish; the bases of the primaries are white, forming a fairly large white patch; upper tail-coverts black, tipped with brown; tail feathers black, margined and tipped with pale brown; beak, blackish; legs and feet, dark brown. Total length 3⅞in., tail 1½in.

Adult female: Olive-brown above; wing and tail feathers brown, edged with olive; below paler olive-brown, with centre of body yellowish-white, merging into ochreous on the under tail coverts.

Habitat: Brazil.

Nests of Chaffinch and Song-Thrush.

By F. Howe.

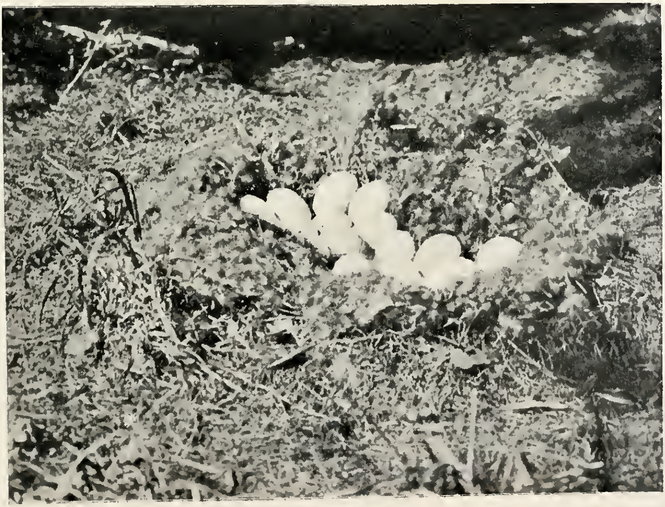
THE NEST OF THE CHAFFINCH.

(*Fringilla cœlebs*).

Of the nests of our British birds I think that of the Chaffinch the neatest and most beautiful. One of these lovely nests, which may often be found cleverly built among the twigs of an apple tree in bloom, is one of the most pleasing sights nature affords. One writer describes the nest of the Chaffinch as "a paragon of perfection."

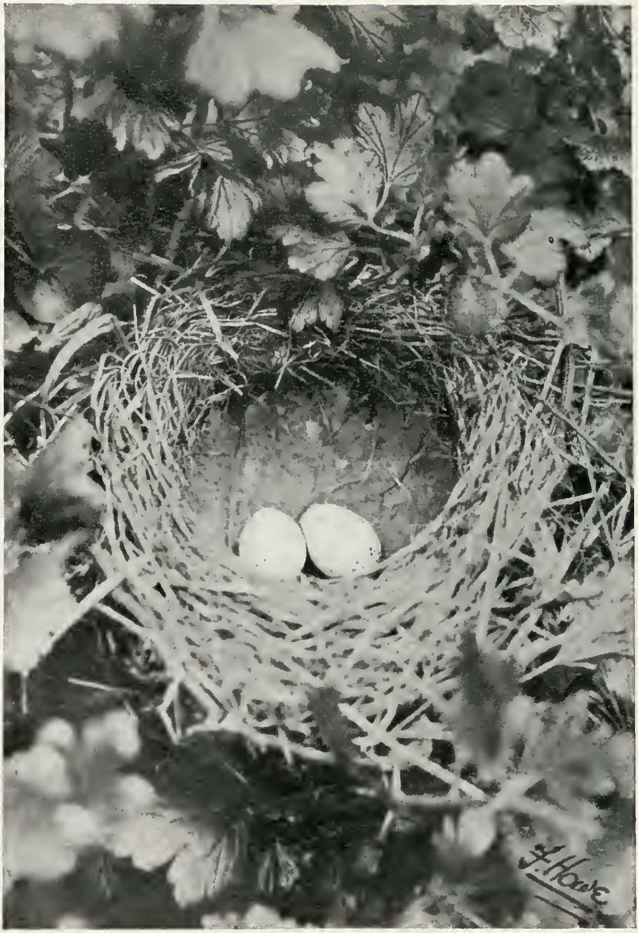
An apple tree appears to be the usual site for the nest, though many are to be found in pear trees. The photos illustrating this article show the site usually chosen, but many are found cleverly constructed among the small outside twigs, where the nest is partially hidden by the leaves.

A nest is before me as I write, and is composed of moss, dry roots, small feathers, wool (sheep's), hay, pieces of string, horse-hair, coltsfoot down, lichen, and a few small pieces of paper. "Chaffie" is fond of decorating the outside of the nest with lichen, and such are often found conspicuously decked out with small pieces of paper, which are woven on to the nest

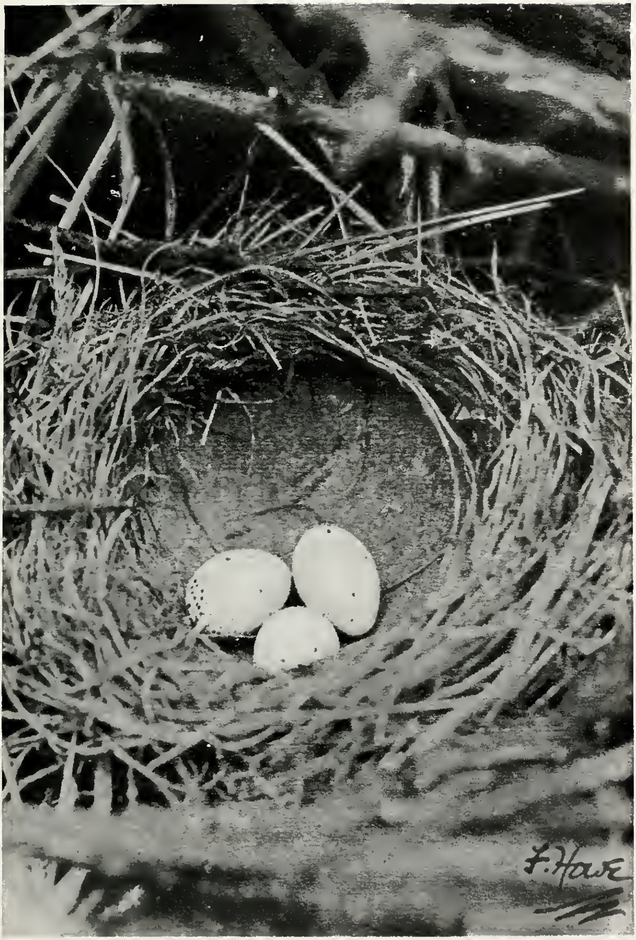


Photos by LADY DUNLEATH.

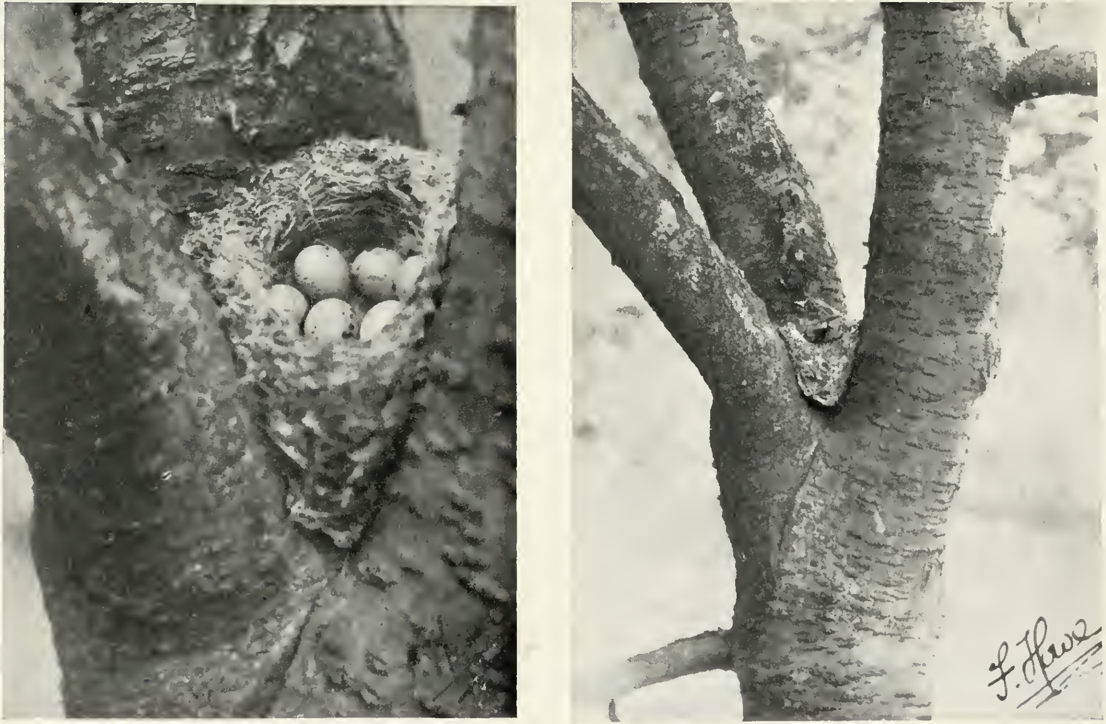
WILD DUCKS. A dual nest.



NEST OF SONG THRUSH
In Gooseberry Bush



NEST OF SONG THRUSH
In Faggot of Sticks.



NESTS OF CHAFFINCH SHEWING EGGS AND SITTING FEMALE.

by thin strands of sheep's wool. In some villages in this district it is affirmed that the lichen is affixed to the nest by a glutinous saliva made by the Chaffinch for that purpose. But I have always found the lichen and pieces of paper to be woven on by strands of wool.

The nest (which is the subject of these two photos) was built in the butt of a dwarf plum tree. The hen Chaffinch sat very close, and allowed me to approach within three feet of the nest, and sat quietly whilst two plates were exposed.

The nest (photographed three days later) contained six eggs, which is more than the usual number, the average clutch consisting of four or five. The characteristic blotches and markings of the eggs are well shown in the photo.

* * *

CHAFFINCH NESTING IN CAPTIVITY.

[It may be interesting here to recall an event which occurred some years ago in my aviary, when Britishers shared the space with their foreign rivals. The birds in question had been in my possession some three years and were both caught in the garden.

During the pairing of the birds, the swooping flights and violent courtship, common to the species, were indulged in, in fact by the time they settled down to nesting both bore signs of the conflict (I cannot find a better word) they had been through. I may say, though they had space, copulation only took place on the ground and in the branches, this was always followed by a sort of prolonged guttural rattle on the part of the male. As fallacies die hard, I repeat here, no attempt was made at copulation in the air, though there was ample space for this in their enclosure. In the fields I have seen them locked together during the violent pairing flights; there are but few who still cling to this fallacy that copulation takes place in the air; personally I fail to see how a careful observer could have taken the violent pairing flights and their being locked together in stern conflict during same for copulation.

As soon as they were fully paired, the hen began to build in an earthenware nest bowl close against the roof of shed; the male gave no assistance beyond supplying a little material, he was mostly occupied in pouring out the nuptial song. Four eggs were laid, but by the time the incubation period (14 days) had expired but one remained, this was successfully hatched, the youngster was strong and lusty, but after the first two days they refused to feed. Being taken somewhat by surprise I had no small insects available, and by the time these arrived the youngster was dead.

The fledgeling was blind for the first two days; it was covered with longish yellow hairs, its skin flesh colour with dark blackish-grey patches on the head and wings.

I have often regretted since I did not repeat the experiment, but in the fall of that year I gave all my British birds their liberty, to make room for an increased number of foreigners.—Ed.]

THE NEST OF THE SONG-THRUSH.

(*Tordus musicus*).

Many and varied are the sites selected by the Song-Thrush for building its nest—hedges, hedge-bottoms, bushes, butts of trees, heaps of faggots, and often on the ground. Of the two accompanying photos one nest was built in a heap of faggots and the other in a gooseberry bush. Each will be readily distinguished. The inside of the nest of the Song-Thrush is a mixture of mud, rotten wood, etc.; it is almost water-tight, and somewhat resembles the inside of a cocoa-nut shell. This latter will be plainly seen in the two photographs, as will also the spots on the eggs.

The well-known winning Song-Thrush belonging to Mr. R. J. Howe was taken from a nest built in a rhubarb root. At the time of taking the young the nest was half-full of water, the result of a heavy rain the previous day. The young Thrushes (which were four in number) were in a wretched plight, and suffered from cramp some few weeks after.

Woodland Sounds.

By Mrs. E. Warren Vernon.

How often does one read of the "Silence of the woods." Let us go into one, and sitting down, rest quietly, and listen. From the nearest tree first a cock Chaffinch shouts his rather monotonous song of love, only varied by a very shrilly uttered "Pink pink," to attract his mate's attention.

Tomtits call to each other to join in the hunt of the juicy, green caterpillar, and the still more delectable green fly, their little hearts delight in, scolding angrily every now and then.

Soon a Woodpecker will begin to tap the bark of some favoured tree, and the common Flycatcher will sing his most irresponsible of songs, "Chiff chiff chiffy chiff chiffy," flying without stopping his music, from the branch over the pond to catch an unsuspecting fly.

Then sometimes a half-dozen Goldfinches will alight, fighting among themselves and hunting for seeds in the topmost boughs, their well known "Sippet-sippet" adding to the already musical chorus, and the lovely gold in their wings shining brightly among the leaves, as they fly from tree to tree.

From the reeds comes the calls of Willow Wrens, Warblers, Buntings, and below the voice of the Moorhen, calling her brood together, for fear of that dreaded enemy of all waterfowl, the pike. The Coot is in a sad state of mind, having missed a newly hatched nestling from its home, in the stumps of an old willow.

Wild Duck quack merrily, except one old drake, who is swimming sadly alone, awaiting his wife, who has not yet hatched her late brood, causing the lonely drake envious thoughts as he watches Mrs. Moorhen and her handsome family cross the pond.

Occasionally a couple of Screech Owls will mew to each other, exactly like cats, and add to the many and varied sounds.

Pheasants call, Doves and Pigeons coo, fish jump, and above all midges bite, how then can any one say woods are silent.

Notes on the Wild Life of the Inhabitants of our Aviaries.

[Our notes this month are compiled exclusively from "Bird Lore" (excepting the two last, from this year's issues) the official organ of the Audubon Societies of America. They will I think be found of much interest though they treat of birds not commonly kept.—ED.]

THE FEEDING HABITS OF THE BLUE JAY. The Blue Jay is always with us summer or winter. In the latter season he frequented the corn cribs of the farmers, and would come familiarly into the neighbourhood of dwellings. As a boy I liked the sociable fellow in winter, but in the summer the Jay is hated by all the other birds and I could not help sharing in their feeling. At this season he is a sly and ferocious robber of eggs and young birds; and I have never seen the birds gather in screeching flocks against any of their enemies, as I have seen and heard them with the Jay. He seemed to have a special greed for the young of the Baltimore Oriole, but this robber is not particular in his choice. All the birds hated him, and he preyed upon the eggs and young of all.

JOHN HUTCHINGS, Litchfield, Conn.

THE BLUE JAY AS A DESTROYER. In Dundee, Illinois, while walking down one of its shady streets, I saw a Blue Jay ferociously tearing to pieces a young callow English Sparrow just picked out of its nest. A friend testifies that she saw at Stevens Point, Wisconsin, a Blue Jay eating the remains of a young Song Sparrow just filched from its nest on the ground. I don't believe that every one of the Jays are such depredators, yet there is sufficient testimony here in the West to establish the fact that much as we delight in this bird on a cold winter's day, that he does sometimes develop strong cannibalistic tendencies.

GEORGE B. PRATT, Chicago, Ill.

* * *

THE BLUE JAYS' FOOD. Geo. G. Blanchard, quotes from the Boston "Evening Record" the following: The Blue Jay eats moths and their eggs. Dr. Hatch while calling on a patient noticed a Blue Jay at work on a tree near the window. Upon investigation he found it was breaking into the nests of the brown-tail aud eating the eggs and the moths themselves. The bird cleared the tree and was busily engaged upon another when the doctor left. Upon examination he found that every nest had been cleaned. Bird students explain this by saying that the crust (January 1st) has been hiding a great deal of the bird's food, and he is getting what he can find elsewhere.

* * *

ROBINS AND SPARROWS. Though for many years an interested observer of bird-life about my home, it was not until last summer that I noticed the English Sparrow had begun to trouble the Robins, so much that the latter are now seen in fewer numbers than during the past season. The cause is as follows: As soon as a Robin alights, the Sparrow will fly down and follow it closely, when the Robin pulls a worm, the Sparrow rushes in and seizes and flies off a few feet to swallow it. This performance is gone through nearly every time a Robin visits the lawn, so that now they rarely visit the place where once as many as eight or ten might be seen at once foraging for worms, etc.

[It appears that *Passer domesticus* fully maintains the evil reputation it has earned at home, in every country to which it is introduced.—Ed.]

* * *

THE HUMMING BIRD THAT WANTED LIGHT. A pair of Broad-tailed Humming Birds built their nest on an electric light fixture in the porch of a residence in Colorado Springs. The light is directly in front of the door, which swings out, and comes within a few inches of the lamp when opened. In spite of people passing in and out quite frequently, and sitting on the porch much of the time, they did not seem to disturb the bird. Two young were successfully reared in the nest and flew away. The parent bird (or possibly another attracted by the nest) was seen to come back once after the young had flown, examine the nest and then depart.

EDWARD R. WARREN.

[This account, of which the above is a very brief extract, was illustrated by a very good reproduction of a photograph of the sitting bird.—Ed.]

* * *

The following two accounts are compiled from Mr. A. J. Campbell's article on Bower Birds which appeared in "Bird Lore" for October 1900.—Ed.

THE SATIN BIRD (*Ptilonorhynchus violaceus*). He describes the male as being specially beautiful in his satin-like blue-black coat and beautiful violet eyes; the female is clad in a grayish-greenish mottled dress, which is also the color of the young; the adult plumage is not obtained till the third or fourth year, some say not till the seventh year.

It is found principally in the coastal forests of Eastern Australia, they thrive in captivity, are poor whistlers, yet readily learn to articulate words and are good mimics.

He describes the eggs as being of a rich cream colour, irregularly blotched with brown, nearly 1¾ inches long, two being the usual clutch, occasionally three are laid.

The nest is usually found at the height of 12ft. in a tree or bush, constructed of twigs and leaves loosely put together. He notes as strange the fact of these birds building so neat a bower (the walls of which are 12in. high, 10in. long and 6in. apart) should build so slovenly a nest he further states that more than one pair of birds frequent the same bower—a lovers' bower—a rendezvous for matchmaking.

In Mr. Phillipps' aviary these birds made quite a huge erection, while the birds in the Western Aviary at the Zoo., a comparative small one, and but a poor apology for that built in a state of nature, as shown in the fine reproductions, from photographs taken on the spot, illustrating Mr. Campbell's article.

* * *

REGENT BIRD (*Sericulus melinus*). He describes this as being one of the most gorgeous birds that emblazon the sub-tropical scrubs of E. Australia. The male has strikingly beautiful plumage of black and gold, yellow colored eyes and bill. The female is more soberly clad in a brownish olive mottled dress, dark brown eyes and bill.

The eggs (mostly two) are strikingly and beautifully marked, judging from the illustration; the color is not stated. Its nest is constructed entirely of sticks and twigs, and is very difficult to find. The bower comparatively small, 7 or 8 inches high, 7 inches long, 3½ inches between walls.

(*To be continued*).

Editorial.

The Breeding of Avocets : The Waders' Aviary at the Zoological Gardens has always a great attraction for ornithologists as well as others, it has been doubly so recently, for a pair of Avocets *(Recurviróstra avocétta)*, of which there are a fine flock in this natural enclosure, has successfully nested, and hatched out three fledgelings, of which one survives, with every appearance of being fully reared. The following details are partly from my own observation, and from details courteously supplied by the attendants and Garden officials.

The nest was commenced just before Whitsun, dead laurel leaves and twigs were gathered together and a mat-like structure formed ; three eggs were laid and incubation commenced on May 19th, hatching out all three on June 13th, the male shared in the duties of incubation, relieving his mate at regular intervals. Two of the fledgelings were unfortunately killed almost immediately. The female was very excited, thus attracting another male, and in the struggle two of the young were trampled upon. The surviving chick is doing well, it took to the water when a week old and commenced swimming and foraging (at least in part) for itself. One of the keepers states he saw it pick up food when three days old, and that it could swim like a duck.

It was most interesting to watch the old bird fostering her young, she sits down like an Ostrich and covers her brood with her breast feathers, the young bird assumes the same position, and it is only by close observation that it can be discerned while so covered. One of the keepers described to me an incident which took place the previous day, as follows :—Yesterday the female appeared to think the young one was in danger, she stooped down and picked it up with her wing by its neck, and carried it two yards; while being thus carried only its legs were visible.

At a week old the bill of the chick was over an inch long and already beginning to curl up. When first hatched the bill was quite straight.

This I believe to be the first time these curious, interesting and handsome birds have hatched out in captivity.

Hatching of Redshanks : Another interesting event in this aviary is the hatching out of three Redshanks *(Totanus cálidris)*, of which I hope to have more to say in our next issue.

Nesting of Malabar Starlings : Miss M. E. Baker has had two young hatched in her aviary, and though they only lived about seven days, the event is of sufficient interest to place on record. The calling of the young was the first intimation she had that there was even a nest, though she had seen the old birds flying in and out of a nest box ; this was on a shelf high up in the aviary behind some Fir boughs.

"There was a dreadful storm of wind and rain the night before I ' noticed the death of the young ones, which probably scared the old birds

" and they neglected to brood the young ones, which I opine died of cold.
" At two days they looked very strong and healthy and were being fed by
" the old birds ; when I saw them dead, they had soft down on their bodies
" and were fine big birds, well fed and strong. The nest was rather a large
" one and constructed of straw and grass roots, well lined with feathers."

From the other details supplied I am of the opinion the birds would have been reared but for the storm. While it is not a first occurrence in this country (they have been bred at the Zoo where also a hybrid Malabar and Andaman Starling has been fully reared) it is a most interesting, and also for Miss Baker a disappointing occurrence.

I shall be obliged if members in similar circumstances (providing they do not require them for preservation) would send me the bodies as soon after death as practicable, for the purpose of gathering data. —Ed.

Slaughter of Blue Jays : The following is an extract from a letter by F. W. D'Evelyn, Pres. Cooper Ornithological Club, appearing in the March issue of "The Condor."

The writer deplores the slaughter (last season there were 6,000 counted scalps) of these bold, handsome and interesting birds—the reason being the destruction of eggs and young quail, etc., these must be preserved in egg and infancy, so that the sportsman may "pot" them in early maturity, consequently subscriptions are gathered and prizes offered for the greatest number of scalps.

That the bird is a marauder and pirate is beyond doubt, nevertheless he is not quite so black as he is painted, as is evidenced by the investigations of Prof. F. E. L. Beal.

" Prof. Beal tells us that in the stomachs of 141 Californian Jays
" (*Aphelocoma californica and Cyanocitta stelleri*) 35 per cent. of the contents
" for the year consisted of animal matter and 65 per cent. vegetable, traces
" of egg shells were found only in twenty-one stomachs ; in another series
" of 300 stomachs only three contained egg shells, and two only bones of
" birds."

It would be well if the members of C. O. C. would take the trouble of investigating scientifically the habits and foods of the Blue Jays in their respective districts. I have every confidence that when it can be shown that the Blue Jay, or any other black-listed species, have economic qualities agriculturally much above the species sportsmen seek to preserve, that the good sense of the sportsman and kindly feeling of the farmer's boy will make them less ardent to earn prizes and doubtful heroism in this awful slaughter during the early spring months.

"I submit this matter to the members of the C. O. C.—ask them to aid "in obtaining facts—ask them to graciously aid in obtaining facts—and "indeed in all cases of appeal to be an ever ready and competent court of "equity in all matters pertaining to our local ornithology.

"FREDERICK W D'EVELYN."

[Readers are referred to the notes on the Blue Jay, under the heading of "Notes on Wild Life" in this issue].

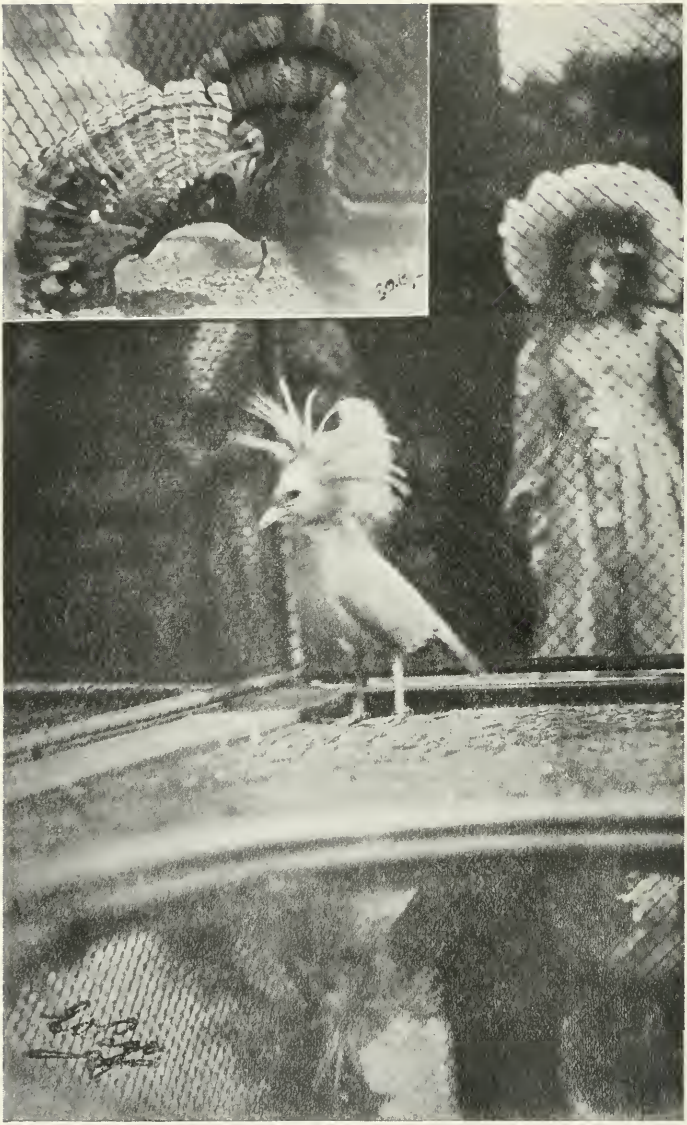
Do Birds Desert Young? The following is a reprint of a letter appearing in the March issue of "The Condor." It is a most interesting account, having a bearing not merely on the fickleness, but also the wooing of the sexes.

"Mr. W. Otto Emerson tells of a newly mated pair of Orioles, *Icterus* "*bullocki*, that he saw one day about a grove of Eucalyptus trees. The "male was in fine plumage and he shot it for his collection. The next day "the female appeared with a new husband, who was as bright and fine look-"ing as the bird that was killed the day before. At first chance this male "was also shot, partly it was said, because of his fine plumage, and partly "to see if the female could find another mate as readily. Two days later "she appeared with a third husband, who went the way of the two former "ones. The female then disappeared for a few days, but returned again "with a fourth suitor. These two began building and soon had a home in "the Eucalyptus grove. This may be a remarkable case of wooing and "winning, but very likely the widow Oriole was breaking up other families.

"Whenever I have found nests that were deserted when they contained "eggs or young, I have attributed it to accidental death of one or both "parents. But this is not always so.

"During the Summer of 1905 I was making a study of a family of "Bullock Orioles that nested in a Willow tree. On June 13, there were three "half grown young in the nest. Both male and female were feeding. "Suddenly, I noticed a brighter coloured male fly over and light in a near-"by tree while the father of the nestlings darted at him and drove him off. 'The next morning I noticed the same male appear and there was another "fight. The mother had been feeding her young, but as the hours passed "her visits were fewer and I noticed only the male was bringing food. The "next day the female had deserted her young entirely, for only the "male was about and he had assumed entire charge of the household.

"It happened a rain storm came up that night, and as the young birds "were not covered we found them dead the next morning. The male was "about with food, but there were no young to be fed. He stayed about "most of the day, but I did not see the mother again. From all appearance "she was a deliberate deserter. Can it be that some birds are as unbirdlike "as some people are inhuman?"—WILLIAM L. FINLEY, Portland, Oregon.



THE KAGU (Rhinochetus jubatus).

Inset—SUN BITTERN DISPLAYING.

The Kagu *(Rhinochetus jubatus)* **and Sun Bittern** *(Eurypyga helias).* The fine photographs by my brother (Mr. E. O. Page) reproduced herewith, figure two very interesting and rare birds. Probably only about six or seven of the first-named have reached this country alive, and these have all been exhibited at the Zoo two in 1862, one in 1866, two or three in 1884-5, and one in 1906, the latter forming the subject of our illustration. The Kagu has been noted in this (*see Dr. McDonagh's article, " Wanderings in the Zoo " in March issue*) and other journals. The photograph is perhaps marred by the figures in the background, but the photographs had to be taken as opportunity occurred and the camera with the birds' display attracted the crowd. A rather melancholy interest attaches to the photograph of the Sun Bittern, both specimens* dying about three days after the photographs were taken, and an accident happening to the negative showing the whole bird in sharp focus, have had to be content with a somewhat indifferent figure, but it was most difficult to get the bird in such an angle as to get the whole figure sharp, and the light was poor. To see one of these birds (simply an arrangement of browns when in repose), displaying its wings with their gorgeous hues (purples, etc.), to the summer sun is a sight to be remembered. But this note is principally about the Kagu, it is most droll to note this bird parading with a sort of ludicrous stately march, start off in a most ungainly and very rapid run. The late Mr. Bartlett describes this in P.Z.S. 1862:

> " With crest erect and wings outspread, the Kagu runs or skips about, " sometimes pursuing and driving before him all the birds that are confined " with him in the same aviary, evidently enjoying the fun . . . . . at " other times he will seize the end of his wing or tail and run round " holding it in his bill . . . . . During his frolic he will thrust his bill " into the ground and spread out his wings, kicks his legs in the air, and " then tumble about as in a fit."

Mr. Bartlett noticed at the time its close affinity to the Sun Bittern (see inset on plate), such as the development of powder-down upon its plumage etc. Anatomical research has confirmed this conclusion.

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* For some time previous to their death both these specimens had failed to develop the powder down on their plumage, and had become infested with parasites.

The photo gives but a poor idea of the actual display. I have on several occasions seen it, when the whole of the feathers of the nape have been raised, not merely perpendicularly, but leaning well over to the front (somewhat so ⌒), in a complete crescent, imparting to the bird quite a striking and fine appearance.

Correspondence.

NOTES ON WILD DUCKS (*with plate.*)

Sir,—The enclosed photographs may interest some of the readers of *Bird Notes.* I have about twelve wild ducks, and they make their nests in the Pampas grass near a stream, under the spreading branches of the trees. About a month ago I found two ducks had made their nests close together, having between them twenty-two eggs. I then separated the nests, as I was afraid of the eggs not being properly covered. I put them about two feet apart placing a branch between them and leaving eleven eggs in each nest. In two days they had removed the branch and joined the nests together again. One egg disappeared and to-day twenty young ducks have hatched, and the other egg contained a fully developed, but dead duckling.

The ducks were completely hidden from view by the drooping branches of the *Cedrus deodara* under which they had built. Both photographs were taken while the branches were being held up; the camera being placed within three feet of the sitting ducks, and as they fancied they would escape being seen by keeping perfectly still, I was able to take a time exposure.

As soon as the eggs hatch, we collect the young ones and shut them up with the mother in a rat proof enclosure until they are old enough to take care of themselves.

I have now over 100 young wild ducks. The parents are very good flyers. In the winter I shut up all I wish to keep for stock, the rest are driven and fly well affording good sport.

N. L. F. DUNLEATH.

THE GENUS *SPERMOPHILA*.

SIR,—The little finches of this genus have always had a special attraction for me, and I have at different times possessed examples of all the more commonly imported species as well as of one or two of the rarer ones.

I see that, in your interesting series of articles upon the genus, you remark concerning the Half-white Finch (*Spermophila hypoleuca*) that you "do not think any living specimen of this species has yet reached this country." I may say that I had a male Half-white Finch for some years in the "nineties," and a few remarks about it will be found in the *Avicultural Magazine* (Original Series) Vol. II. p. 57. It is a rather larger bird than most of the genus, and my example became spiteful in his old age. The few notes are loud and peculiar, but scarcely melodious.

I have had two male Lined Finches at different times, and they are attractive birds with a good song, but I should not describe the species as "alert and confiding." I found it inclined to mope, and Mr. R. A. Todd records the same experience. The tendency to overgrown claws, which it shares with the Mannikins, is most noteworthy, and is mentioned by both Mr. Todd and the late Mr. Erskine Allon, and would seem to be the result of its inactivity. My first specimen spent about a year in my bird-room before attaining adult plumage, so it is probable that this is not assumed until the second, or possibly the third, year.

HORATIO R. FILLMER.

[The two Lined Finches I possessed some years ago, were alert and confiding birds in a medium-sized garden aviary, and never did any harm to the small Waxbills, etc. occupying their enclosure. I am a frequent visitor to the London Zoo and have carefully studied the specimens there, and while not as alert as the two specimens aforementioned, they certainly were neither dull nor mopey, but fairly active and fearless, almost continuously uttering their sweet little lay. Mr. Fillmer's interesting communication amply illustrates the fact, that there is as much individualism in birds as there is in genus *Homo, and that it is only from the records of the many*, that the true demeanour etc. of any given species can be accurately learned.—Ed.].

WINTERING CORDON BLEUS OUT OF DOORS, ETC.

Sir,—I have for a long period kept birds in cages, but last year decided to put up an outdoor aviary, following the hints given by the late Dr. Greene in his book on Cage Birds.

It is a wire-netting lean-to structure 12ft. long by 6ft. wide by 9ft. high at its highest point; it is built against a brick wall and has a South aspect. A large cage, part wood and part glass stands at one end, raised two feet from the ground, this contains a tray for sand and the food vessels; branches and twigs are used for perches. A wide strip of American cloth covers about a fourth part of the roof of flight. There are two Myrtles growing against the wall inside aviary and two stout Fir branches are fixed into the grass floor. It contains eight small foreign birds, Waxbills of various kinds, a pair of Cordon Bleus, and a Cutthroat; the latter chases the other birds about considerably, but otherwise does no harm. [If a mate were provided he would probably worry his fellow captives less.—Ed.] The Cutthroat has a funny way of spreading out its feathers and dancing up and down to a low kind of clucking sound, which it keeps up all the time [the nuptial dance.—Ed.]. As there is no means of either lighting or heating the aviary, it was a relief and pleasure to find that the birds had not suffered from their first Winter (which was long and cold) out of doors, but are in the best of health and plumage. The Cordons have commenced to build a nest in one of the Myrtles, a very exciting event. They seem to prefer the open air to cocoa-nut husks and wooden boxes. The late heavy rains will I fear have a discouraging effect on their ardour.

Hon. Mrs. Somerset Ward.

[The above interesting account is by no means an isolated case, and amply proves that those which survive the conditions of importation, etc. are most certainly not delicate; but kept under hygienic conditions will live and thrive for several years in captivity. But how few the numbers are which survive the hardships of importation is, alas, only too common knowledge.—Ed.].

SILVERBILLS AND SILVERBILL × BENGALEE HYBRIDS.

SIR,—It may possibly interest some of the Members of the F.B.C. to hear how I have fared with Silverbills, as I see in the April issue, "Early Nesting Notes," that they are not free breeders in captivity.

I live on the Italian Riviera and have three small aviaries in my garden; the birds live out all the year round, with only curtains to protect them from cold at night Three years ago I bought a pair of Silverbills, they and their progeny have bred continuously for two years, so much so, that last May, before leaving for England. I destroyed 80 of their eggs, and on my return last October I counted twenty-one (old and young) in the cage. This Spring they have not nested. probably they are overcrowded, so I am thinning them out.

I have also some interesting mules from a Silverbill and a fawn and white Bengalee, the nest that produced these birds had a Silverbill and a Bengalee sitting. three birds were hatched out and these have the colouring of the Silverbill but more the form of the Bengalee, whilst both the song and the courting movements are those of a Bengalee. M. M. HUBBARD.

[The reference in "Early Nesting Notes" was to the Indian Silverbill, which is not by any means freely imported; it is quite possible some instances of successful breeding may have been recorded, merely as Silverbills breeding as in the above; where such has been the case it has been assumed that it was the African species which was referred to, these being very freely imported and breeding more or less intermittently in the aviaries of aviculturists all over the country. The hybrid Silverbill x Bengalee has been reared by Mr. Fillmer I think, and exhibited by him at one of the Palace Shows, and if I remember rightly its resemblance to its parentage was very similar to Mrs. Hubbard's specimens.—ED.].

PNEUMONIA AND SEPTICÆMIA.

SIR,—May I ask if you will kindly answer the following queries, either privately or through *Bird Notes.*

To what extent does pneumonia and what is usually called a chill affect septicæmia? Do either of the first named (pneumonia and chill) occasion septicæmia of themselves? What is the correct remedy for pneumonia or chill with birds either in cages or outdoor aviaries?

Please accept my apologies for troubling you.

J. H. HARRISON.

Vide article "Pneumonia and Septicæmia" on page 135.

Post Mortem Reports.

(*Vide Rules*).

The Hon. M. C. Hawke answered by post

HEN YORKSHIRE CANARY. (H. K. Picard). The cause of death was internal hæmorrhage, resulting from rupture of one of the largest vessels at the base of the heart. There was much internal fat.

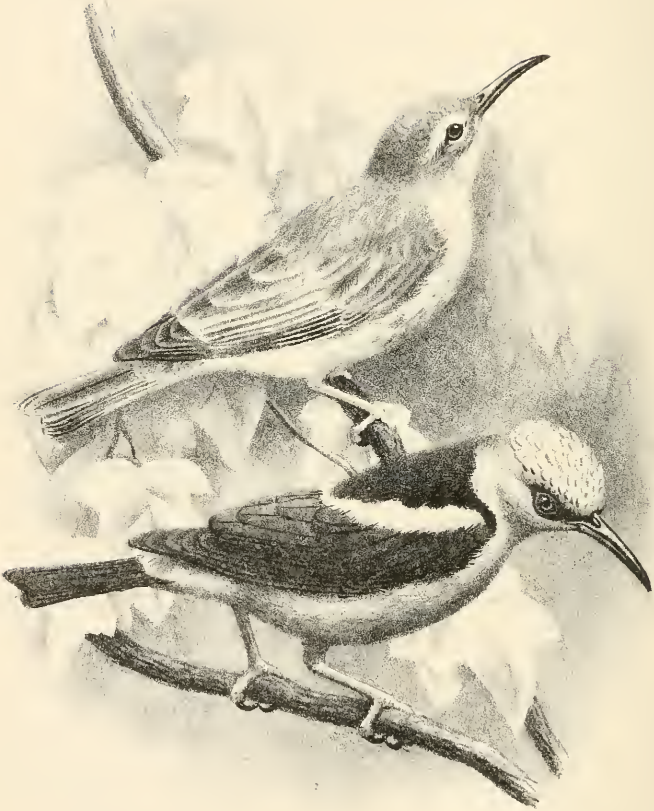
COCK BLUE-BONNET PARRAKEET. (C. H. Row). The breast bone was sharp indicating that it had been ill some days. Cause of death acute septic fever, which frequently manifests itself by "fits."

HEN CANARY. (Miss M. Gibbons). Found dead on the nest. Cause of death, hæmorrhage resulting from rupture of the heart.

COCK YELLOW BUDGERIGAR. (Miss H. L. Morgan). Cause of death was enteritis, probably from a chill. Canary seed and white millet are sufficient to keep these birds in good health. They are very fond of green food, including cabbage leaves.

HEN BUDGERIGAR. (C. H. Row). The cause of death was the so-called egg binding, resulting from catarrh of the oviduct, so common during wet chilly weather.

HENRY GRAY, M.R.C.V.S.

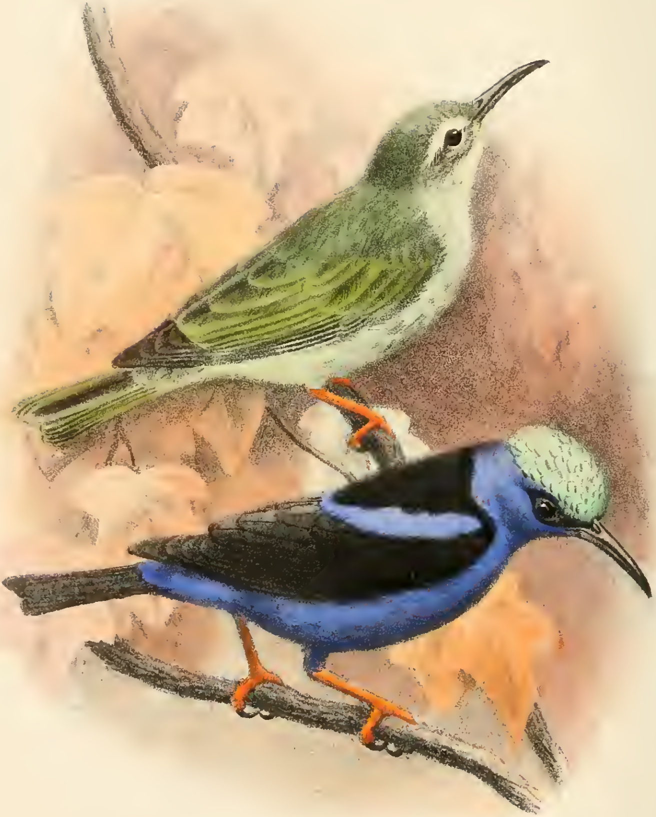


H.Goodchild del. et lith. Huth imp.

YELLOW WINGED SUGAR-BIRD.

Cœreba cyanea.

♂ From a living specimen in the possession of M^rs K Leslie Miller.



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BIRD NOTES:

THE JOURNAL OF

THE FOREIGN BIRD CLUB.

Yellow-winged Sugar Bird.

Cœreba cyanea.

By Mrs. K. Leslie Miller.

Our Editor has asked me to write a few words about my Yellow-winged Sugar Bird to accompany its portrait.

At the end of October last year I received a letter asking if it would interest me to see a Purple Sugar Bird, and I accordingly went and saw a little dingy green bird with the brightest legs and feet imaginable. The brightness of eye and the merest sign of a turquoise feather or two on his crown, helped me to a decision I have never regretted, and "Sai" became a member of the family.

This bird is one of the brightest and most knowing of my large pets, and he has never ailed anything. All through the long dreary winter has this dainty sprite taken his morning tub and sung his queer little song to the accompaniment of the scraping of trays and perches while the other birds were being cleaned up for the day. "Sai" takes the greatest interest in what the other birds are having for their breakfast, and if his cage is put on one side where he cannot see them, he keeps calling and craning his neck to peep until we satisfy his curiosity.

His food consists of honey and fruit principally, with some flaked sponge cake mixed with grated sweet almonds and some small insects. My dear bird has a decided character of his own, and we always feed and attend to him before any other bird, or he will sulk for some time. He loves to be noticed and spoken to and looks his prettiest then, with his pretty head on one side and crest erected.

This bird came into full colour in March of this year, and at present he remains so.

I am afraid I have said very little that will be useful to our members, but I have over thirty birds in different rooms in the house, and all are kept in cages and receive careful and individual attention as well as much petting. It will be readily understood that I have very little time for making notes or writing about them, more especially as I am handicapped by very delicate health and a multitude of other matters to claim a share of my time and attention. I should, however, be pleased to show my pets at any time by appointment, to any of our members who wish to see them, particularly those who think that birds cannot thrive and be really happy in cages.

The Yellow-winged Sugar bird is quite easy to keep in health, and is a most lovable creature.

The Genus Cœreba.

By Wesley T. Page, F.Z.S.

This truly gorgeous genus ranges over South America from Cuba and Mexico to Southern Brazil and Bolivia. These Blue Creepers of the tropics of America are second (?) only in daintiness of form and movement to the Humming-Birds, and while general outline and colouring may be pourtrayed, no plate can do justice to their gorgeous and irridescent plumage and fairy like forms. From the records of various travellers and naturalists we find that they are low ranging birds, are found on the outskirts of forests and the trees of open wooded districts; here they are perpetually searching the crevices, bark, etc., for insects; fruit is also eaten.

In captivity they should have a roomy cage, one large enough to take a flowering plant preferably, which should be frequently changed and of a species which harbours plant lice; at the same time they will do without this luxury. Their cage must be kept where it will get plenty of sun and fresh air yet be out of *draught*. I cannot approve of the hothouses in which they are kept at the Zoo. I have carefully watched the birds there, and noted when these glass cages were adopted how soon the birds, which had been in perfect condition with the ordinary box cage, soon became "soft" and ill-conditioned. And from carefully watching the birds there and also those of private aviculturists I strongly advise a roomy semi-box cage for their home. The B. M. Cat., Vol. XI., gives four species, viz., *cyanea* (type), *cœrulea*, *lucida*, and *nitida*.

THE YELLOW-WINGED SUGAR BIRD.

C. cyanea.

Male: The principal body colour is rich, velvety purple-blue; lores, eye region, wing and tail, velvety black; cap, pale blue; inner webs of wing feathers and underside of wings, sulphur-yellow; bill, black (long and curved); feet, ruddy flesh-colour. Total length 4⅜ in., tail 1⅜ in.

Female: Above, green with centres of feathers darker; wings and tail blackish and dyed with green; eye streak, whitish ; under wing-coverts and inner webs of wing-feathers, sulphur-yellow ; under surface, pale yellowish green, faintly striated ; bill horn colour ; legs and feet, brownish flesh.

Habitat : According to Museum Cat., it ranges from S. Mexico over Central and South America to S.-E. Brazil and Bolivia. Also found in Cuba.

THE PURPLE SUGAR BIRD.

C. cœrulea.

" Male : Above and below purple-blue ; lores, throat, " wings, tail and under wing-coverts, black ; bill, black ; feet, " flesh colour : whole length 3·7 inches, wing, 2·2, tail 1·1. " Female : Above, dark green ; lores, rufous, below, pale " yellowish, with dark green striations : bill blackish ; feet, " brown."

" Habitat : South America, from Colombia to Amazonia, " Eastern Peru and Bolivia ; to the north of Colombia it is " replaced by *lucida*." (B. M. C., Vol. XI.)

C. lucida.

" Male : Above and below, deep purple ; lores, throat and " front of neck, wing, tail, and under wing-coverts, velvety " black ; bill, black ; feet, flesh colour ; whole length 4·5 " inches, wing 2·4, tail 1·25. Female : Above, dark green ; " lores, rufous ; below, pale yellowish ; with dark green " striations ; throat, rufous."

" Habitat : Guatamala and Central America, south to " Panama." (B. M. C., Vol. XI.)

C. nitida.

" Male : Bright bluish purple ; lores, throat, patch ex- " tending over breast, wings, tail, and under wing-coverts, " velvety black ; bill, black ; feet, pale flesh-colour ; whole " length 3·5 inches, wing 2, tail 1. Female : Dark green, " throat and middle of belly, pale ochraceous ; sides of body " striated with whitish ; crissum, yellowish."

" Habitat : Colombia and Upper Amazonia." (B. M. C., Vol., XI.)

The various species of these exquisite birds agree well together: an indoor aviary of say a floor area of 6 ft. by 8 ft., and 6 or more feet high, with about a dozen of these avian gems disporting themselves on growing plants and twiggy branches would make a grand display, and I hope at no distant time to make the experiment. While providing retirement, there would of course need to be abundance of light, and the sun should have free access to at least half the aviary.

Notes on my Parrakeets and Aviaries.

By the Hon. & Rev. CANON DUTTON.

I have been asked to write something for *Bird Notes*, but I have not had much to tell, and I have not the art of writing interestingly about nothing.

It so happened that my bird arrangements were disturbed by my being unable to get a tenant for my Vicarage, which I have let since 1891; and I had to return to it and live in it myself. It has an excellent situation, on a bank sloping to the south, but my aviaries, which were rather makeshift structures, had been allowed by my tenants to go to rack and ruin.

When I returned, it was difficult to know where to house my birds. I turned over in my mind making a clean sweep, but I had a Versicolor Amazon given me by a friend I was unwilling to part with. So I determined to convert a small woodhouse into a bird-room. It made very confined quarters, but it housed for the moment three *Pœocephalus senegalensis*, three *Palæornis longicauda*, one *Pal. docilis*, the *versicolor* and a Blue-fronted Amazon.

I took two *Pœocephalus senegalensis* into the dining room, and then waited our universal genius' leisure for the re-erection of my aviaries, which the tenant who took the house I left wished me to remove. But before that was done, a neighbour, who had housed for me five *Pal. cyanocephala* and two Blue-bonnets, was leaving his parish, wanted me to have them back, so I was rather crowded.

However my two aviaries—a single run of two—are now up. These are against a wall facing S.E. and their dimensions are, roughly, 20 yards long by 5½ feet wide—divided into sleeping houses 2 yards long—sheltered run 5 yards and open run 3 yards. Into these I have turned: into one, one cock *Palæornis docilis*, two cock *cyanocephala*, two hen *rosa*, one hen *cyanocephala* × *rosa*, two cocks and one hen *longicauda*. Into the other: a pair of Blue-bonnets and five *Pœocephalus senegalensis*. The aviaries are unheated, so I expect the *Pœocephali* will have to return to the bird room in the autumn, and perhaps, the *Pal. longicauda*.

I wish the *Pœocephali* could winter out, for one of the two I had in the dining room made a nest in the box I hung on to their cage, and was indefatigable in sitting and laying. When she first laid I do not know, for not expecting anything of the sort, I was not watching her very closely. But after I had missed her for some time, I took occasion to look into the box and saw two eggs in a very neatly made nest. After waiting more than four weeks I took the eggs away. Soon two more were laid. I think these disappeared, for after a considerable time I found two, looking too fresh to be the original ones. After a time two more were laid, but they all proved clear. Why they should all be clear I do not know. I have never seen the birds pair, though I have seen them feed each other. I have an idea that *Psittacus* and *Pœocephalus* do not reach maturity for some time. So often one sees something like this in Bird papers: "My Grey Parrot has laid an egg. I have had her 17, 18, or 20 years" (as the case may be) "and she has never done it before. Is this unusual?"

When I bought my *Pœocephali* they all seemed nestlings, except the one that has laid, which looked very old; and I ask myself was the bird I supposed to be a cock (these two had consorted together when I had the five loose in an aviary) too young to mate? I throw out the idea for what it is worth and only narrate my experiences, because all our real knowledge is founded on a structure of these small facts put together.

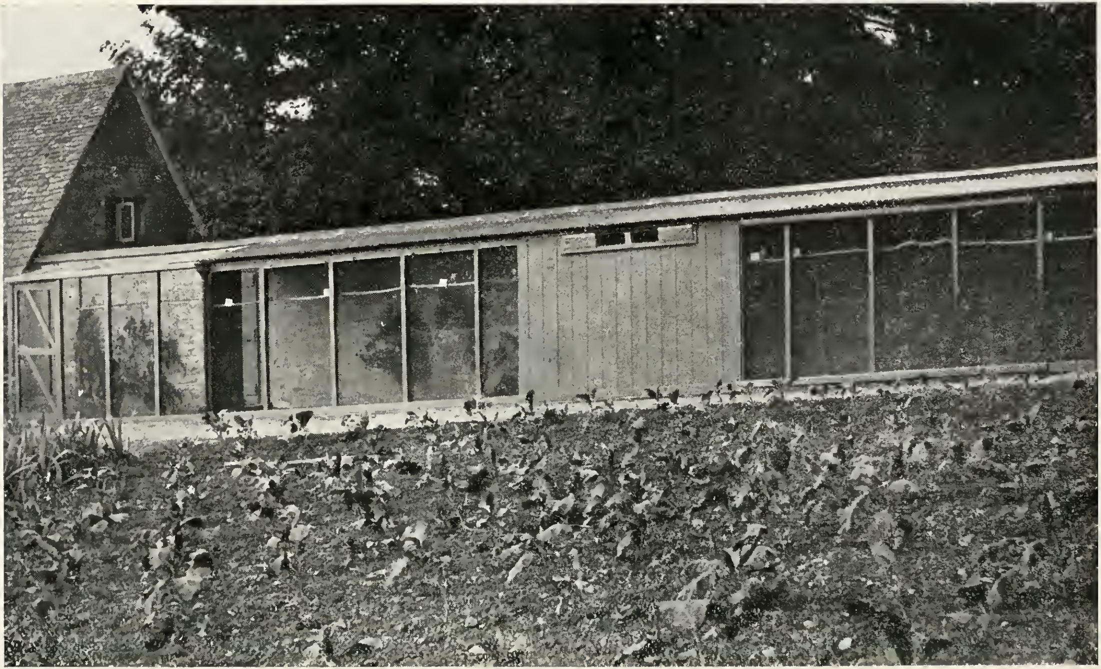
It is noticeable that whereas *Palæornis cyanocephala* never, according to my experience, attempt a second clutch of eggs, but proceed at once to moult, this *Pœocephalus* laid again and again.

It is rather unfortunate that my tamest *Pœocephalus* never develops its flights. When I first bought them, I thought it and several others were pinioned, but I found they were not. However, this bird, though it has the joint, never develops perfect feathers from it. If it had flights, I could trust it loose. Another recommendation for the Senegals is, that they are as easily kept as a Grey. They only want hemp, canary, and millet with an occasional monkey nut. I also give them bits of oat cake and they are very fond of sow-thistles, groundsel they do not care much about.

They are rather destructive, and I keep boughs in the aviary for them to gnaw.

Since writing the above the least tame of the *Pœocephali* escaped. I found the gardener and the man and boy all busy with a ladder. That I knew was of no use. But the bird when it saw me made an absolute effort to come down. I caged one of the others and put it out. The other bird took a flight round, keeping rather high in the air. Then it flew from tree to tree, and in the afternoon I left it on the top of a walnut-tree, pecking the unripe walnuts to pieces. When I returned at night I saw it had not been caught. I asked the gardener at about seven next morning where it was. He did not know. It had gone at night across the river, towards which the Vicarage slopes, on to the top of some high beeches which crown the opposite bank. But as soon as I came out of the Vicarage, at about ten, to take some oat cake to the aviaries, it flew past me just over my head, and came down to a box tree within reach. I sent for a cage, on to the top of which it climbed, and let me carry it into the house. It was rather rough and very hungry, but otherwise it seemed none the worse. Then would have been the moment to turn it out again if it is to be accustomed to flying loose. But the season is too far advanced and I must wait to educate it till 1908.

Pœocephali are delightful pets if taken young. My own experience of wild ones is that they do not get tame, but those taken from the nest make the nicest of all pets amongst the Parrots. They talk, they are so small—pocket pets—they have no dust like the Greys, and are so affectionate. Even the less tame ones fly



CANON DUTTON'S AVAIRIES.

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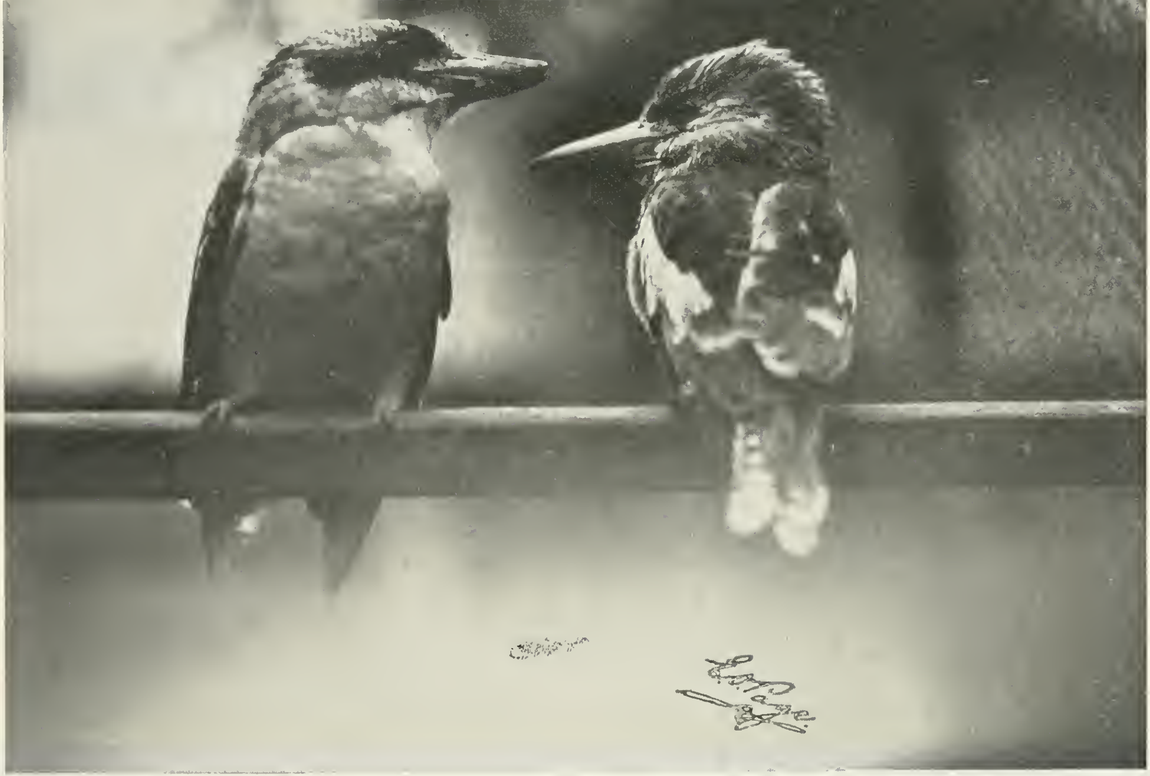

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after me in the aviary. Very different in that respect to *Palæornis*. These are all in a commotion when I enter. The *longicaudas* dash into the sleeping house if they have time. The *docilis* is the only one that stands its ground. I am rather inclined to think it would become friendly with anyone who had the gift of taming birds.

I do not know that *docilis* ever becomes such a good talker as *torquatus*, but I should say after a good *eupatrius* it is the best pet amongst the genus. *Longicauda* never makes the noise the other members of the family do, but then it is *very* stupid. *Docilis* is intelligent and does not make so very much noise. If I could get a hen and breed them and bring up the young by hand I could make nice pets of the nestlings. They used to import them into France in the nestling state, but now they seem difficult to get.

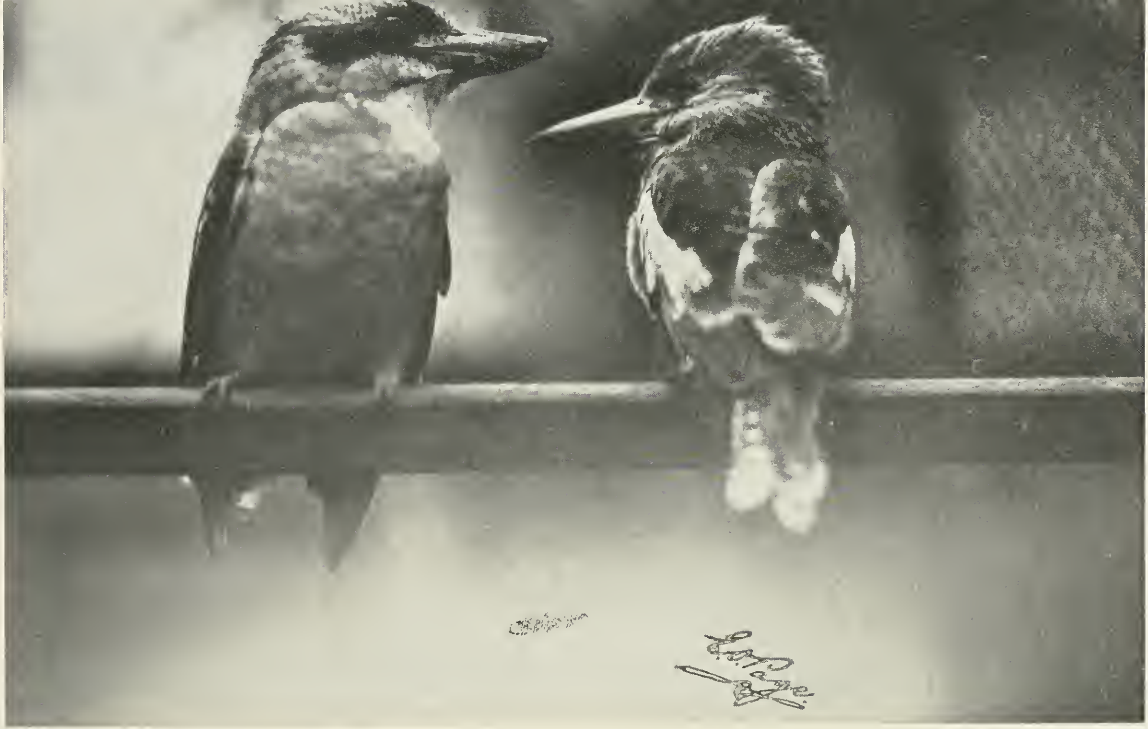
The Laughing Kingfishers.

1. *Dacelo gigantea.*
2. *Dacelo cervina.*

By Wesley T. Page, F.Z.S.

The two birds forming the subject of the plate were photographed in the Western Aviary at the London Zoo early this summer, and show the two species inhabiting, the former Southern and the latter Northern Australia. It is a most useful bird in its native wilds, destroying an enormous number of noxious and venomous reptiles. The late Dr. W. T. Greene gives an instance in "Birds of Brit. Empire," and relates a personal experience as follows :—

> "I once found a lizard in the crop of a *Dacelo* that was as
> "long as the bird itself, and it will kill and swallow a snake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> "I once found a lizard in the crop of a *Dacelo* that was as "long as the bird itself, and it will kill and swallow a snake

"at least twice its own length, and repeat the operation in "an hour."

Those who have been startled at the Zoo by its loud and weird cachinnation, which may certainly be likened to a cross between an idiotic laugh and a donkey's bray, will realise in a measure its startling and uncanny effect amid the quietude of early morning in the Australian bush.

In many respects the habits of the two species are similar. I must say here, that for the following notes on their wild life, I am indebted to Mr. Payne of the Little Zoo, Bath, who, on a recent vist, kindly described to me their demeanour, etc. in the bush. Messrs. Payne and Wallace were the importers of the fine specimen of the Buff Laughing Kingfisher which has been placed on deposit at the Zoo by the Hon.W. Rothschild, and at the present time is the only one in Europe.

Incubation is stated to occupy about three weeks, but is most probably a day or so less than that period. Their nesting site is always at the top of high trees, and usually made by scooping out a White Ants' nest in the fork of a tree. The young remain in the nest about three weeks, and are fully adult in twelve months, in fact they breed the following season.

Diet: This consists of lizards, snakes, frogs, grasshoppers, and any living thing that is small enough to be swallowed. They lay or sit in wait for prey on the branch of a tree, swoop down upon it with closed wings and spear it with their bill; returning to the tree, the capture is banged about till killed, then swallowed whole.

General: Strange to say these two Kingfishers spend the greater part of the year in the dry forest region, only occupying the vicinity of lagoons and creeks during the wet season, which is from January to March. They roost amid the topmost branches of the gum trees.

* * *

THE LAUGHING KINGFISHER (*Dacelo gigantea*).

Dr. Greene aptly describes this as short-legged, big-billed, and thick set; its plumage is grey, varied on the wings with indications of buff and green on the wings, and blue on the head; it is thickly clad, and the feathers of the head can be erected at will, forming quite a respectable crest. As the difference in size and form are clearly shown in our plate further reference to same would be superfluous. This species has hatched out young on two occasions at the Zoo.

Habitat: Queensland, New South Wales and South Australia generally.

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THE BUFF LAUGHING KINGFISHER (*Dacelo cervina*).

The specimen of this species which is on deposit at the Zoo, is one of two, which were taken from the nest by Messrs. Payne and Wallace; they were hand-reared and became so tame that they enjoyed freedom at their Kangaroo Farm, Wild Dog Creek (N.W.A.) Unfortunately one of them was trodden upon by a Kangaroo and killed.

This species only indulges in its merriment at evening and early morning, while *gigantea* utters its weird cachinnations at intervals during the whole of the day.

The plumage of this species is very brilliant, being a warm buff, tinged greenish on wings, and varied with rich blue; the light parts of fig. 2 on plate are blue. In spite of its heavy build, it is a beautiful and striking bird.

It is very scarce and only seen in pairs.

Habitat: North-West Australia.

Chaffinch-Bramblefinch Hybrids.

By Allen Silver.

Miss Reeves of Wateringbury Hall in Kent is well known as a breeder of hybrids, and last year was successful with this cross, rearing two birds to maturity. This year she has again continued her experiments on a larger scale and with considerable success, having already about a dozen young birds fending for themselves.

They have been bred both ways *i.e.*, male *F. cœlebs* × female *F. montifringilla* and *vice versâ*, and the offspring, bred from pairs in which *F. montifringilla* was the male parent, have turned out the more handsomely coloured.

In the nest plumage these hybrids resemble young Chaffinches, varying a good deal however in colour and size (probably difference of sex). One adult bird bred last year quite differed from the unauthenticated specimens exhibited under the name of this cross at the bird shows and like all new hybrids was contrary somewhat to one's expectations.

Miss Reeves has caged up in aviaries batches of British finches and buntings, and in no case is there a male enclosed in any particular aviary where a female of the same species is flying loose, consequently every egg hatched contains a hybrid of some kind. This year thirteen young hatched from the Chaffinch eggs and six from the Bramblefinch eggs. The hen Chaffinches however are earlier breeders than their partners, consequently, as a rule, only the eggs of their second nests get fertilized by the male Bramblefinches, and on the other hand some of the cock Chaffinches are almost ready to moult when the hen Bramblefinches are in full breeding condition.

These eggs are taken and given over to the care of certain wild birds, which have in the several instances reared them up to a certain stage after which Miss Reeves has "finished them off" herself on a diet of green and other caterpillars and mealworms.

The greatest difficulty is to ward off accidents from the various foster parents' habitations, rain, wind, mice, cats, crows, and other troubles, having nipped otherwise successful operations in the bud. It has meant real and endless attention to successfully accomplish these ends, and hardly anyone but a Miss Reeves would have succeeded. When one considers it has been necessary to hand-feed with live animal food most of these hybrids from dawn till dusk, it would indeed have been a cruel return for interest and work if success had not attended the experiment. Miss Reeves has bred hybrids from Canary and Bullfinch, Linnet and Bullfinch, Greenfinch and Bullfinch, Redpoll and Bullfinch, Greenfinch and Goldfinch, Redpoll and Canary, Siskin and Canary, Linnet and Canary, Goldfinch and Canary, and Greenfinch and Canary; the last three readily and easily. Most of the others she has successfully reared to maturity, some of which fetched good prices as exhibition birds. To attempt to describe the birds on paper would give but a poor idea of their appearance, some will probably appear on the show bench, but one would like to see figured by a reliable artist a nestling and four adult birds, one of each sex from the two ways of production.

Nesting of the Ruddy-shouldered Cowbird or Troupial.

(*Agelœus humeralis.*)

By O. Millsum.

I claim no merit for having been successful in breeding the Ruddy-shouldered Cowbird, simply because I was quite unaware, until the event, that I possessed a true pair of *Agelœus humeralis.*

I purchased three specimens from an importation in October last, disposing of one to a fellow aviculturist shortly afterwards, and quite by good fortune I had retained a true pair.

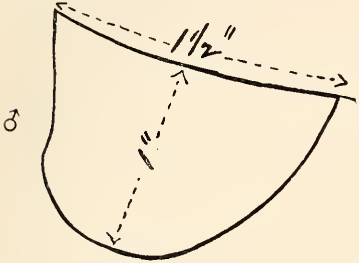
The sexual distinction of these birds is so minute that, accustomed as I am to my specimens, I can scarcely sex them unless perched together.

The female is an exact facsimile of the male excepting that she is of slighter build.

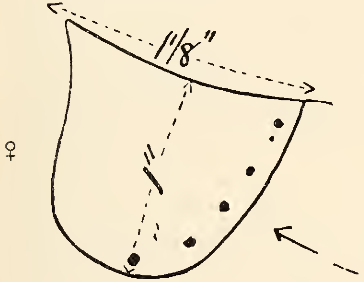
[At my request Mr. Millsum kindly caught his birds and made a minute examination with the following result.—Ed.]

I caught the birds as desired and was then able to distinguish the slight sexual distinctions. It certainly would not be otherwise noticed; even with the birds in the hand I overlooked it at first, but on a second observation the black markings (represented by dots on diagram) were distinctly visible on last row of feathers.

Rough Diagrams showing difference in area and markings of wing-coverts in male and female.



Size and outline of Ruddy Patch on the male. Rich shade of Orange Brown.



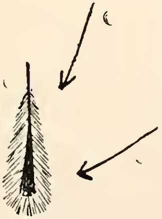
Size and outline of Ruddy Patch on the female.

Equally as rich in shade as on the male, but last row of feathers, (marked by ink spots opposite) are marked as rough sketch herewith, outer web of feathers orange brown, inner as sketched *black.*

No other marks or dots are visible.

Description from B.M.C.:
"Glossy black; wing-coverts "yellowish-brown with a paler "border below; bill and feet, "black: whole length 7 inches, "wing 4·2, tail 3·2.

" *Female* similar, but rather "smaller, and wing-coverts "mixed with black."



These birds have been in one of my outdoor aviaries since they arrived, having as companions Tanagers as under: Scarlet, Olive, Superb, Tricolour, ♀ Black; Yellow-bellied Liothrix, Giant Long-tail Whydah, Crimson-wing Whydah, Diamond Sparrows, etc.

On the walls were placed (more as warm sleeping receptacles than as nests, although I have had fair success with them as such), straw sailor hats, having a hole cut in the crown for entrance, and the brim nailed to the wall. When feeding the Tanagers daily with fruit, I invariably tear off the thin tissue papers which encircle the oranges, throwing them into a corner of the aviary, collecting same alternate days. I was greatly surprised to observe on May 26th, the ends of several of these papers protruding from one of the straw hats; upon examining same I found quite a prettily constructed cup-shaped nest, woven entirely with these papers. I was quite at a loss to understand what bird should be so anxious for parental duties and responsibilities, as I had been under the impression that only male specimens of the various species occupied the aviary.

My interest thus being deeply aroused, I was anxious to watch events; after placing a little hay fibre and hair in a prominent place, I had not long to wait. I noticed one of the Cowbirds very busy carrying to the nest, whilst the other, which proved to be the male, kept all intruders from that portion of the aviary, and amidst his love antics, kept up a continuous display of chatter and rare fuss.

Next morning I glanced again and found a nicely constructed nest. The following morning May 29th, one egg was deposited and so on until the clutch of four was complete. The eggs were of a *very pale* bluish green tint, almost white, boldly marked at the larger end, with dark, variously sized spots and markings.

Thinking it was useless to expect successful incubation, in an aviary containing so many different species, * I did not take any precautions, visiting the aviary as often as formerly, spending the usual time in feeding, cleaning, etc; on every occasion the hen Cowbird left the nest, only to return on my leaving the aviary, thus I conclude Cowbirds are very light sitters.

I may add, I did not notice the male bird assist in the task of incubation, although he proved a good parent, as I will shortly explain.

As aforementioned, not anticipating success, I was more than surprised on the thirteenth day to hear the chirp of young, and I found there were three young in the nest.

The birds would allow me to take out the eggs, and also their young, as often as I wished. †

About the seventh day I noticed only one was making satisfactory progress, whilst one was slowly but surely being starved; this died a day or two afterwards. I next observed that another was not getting his fair share of food, for a time I assisted the parents by hand-feeding; but in spite of this it died. The other was by now a most promising youngster, being practically fully feathered, even to showing the ruddy wing-coverts. It lived to be able to leave the nest and fly about the aviary, but not to peck for itself. In a few days I noticed it appeared lumpy, so I again assisted the parent birds by hand feeding. I

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*It is not well to treat lightly any chance that occurs. In my avicultural experience *it is the unexpected* and not the probable that comes off.—ED.

†This is not good practice, it frequently causes the desertion of either eggs or young, though some species will tolerate any amount of interference; in most cases all necessary observations can be made with a hand mirror.—ED.

am assured this would have succeeded, but business took me away from my birds for nearly two days, the result was the young bird suffered for want of food, from which cause it died the following morning.

The parent birds were most energetic feeders, so I am convinced the only thing lacking was insufficiency of live insect food. No difficulty would be experienced in breeding and rearing these most interesting of aviary pets, if a plentiful supply of live insects could be assured.

You can, however, imagine it was impossible for me to do this when about thirty other insectivorous birds occupied the same aviary. Whenever I placed mealworms, gentles, etc., within sight, they were greedily eaten by the other birds, before the Cowbirds had much of a chance to carry any to their young. It was, however, a most interesting sight to watch both the Cowbirds, with a gentle exposed in their beak, alternately entering the nest and as hurriedly leaving it, after having disposed of the insect, to fly again to the food tin for others.

The Ruddy-shouldered Cowbird is one of the most interesting of aviary pets, and as the Editor has already recorded in *Bird Notes*, Vol. V., No. 8, Nov. 1906, such an accurate and able description of this species, it would be futile for me to attempt to further describe them. I should like to add, my experience with this species exactly coincides with that article.

The food to which my birds have had access is, canary, millet, oranges, bananas, apples, pears, insectivorous food, both dry and moistened with boiling water; they sampled the lot. They were always in perfect feather, except during the moult; the beautiful sheen of their plumage is a pleasure to see. I would strongly recommend this species as a desirable aviary pet.

[This is a most interesting occurrence, and is the first time this species has nested in this country. Aviculture provides many such disappointments, yet it is these which give zest to this fascinating hobby. The only species of Cowbird (I have not looked up records), that has reared young, which lived to be able to fend for themselves, is the Silky Cowbird (*Molothrus bonariensis*).—ED.]

Notes on Avian Cholera.

By H. GRAY, M.R.C.V.S.

(See P. m. report, Pennant Parrakeets, T. Wilson).

The disease appears to be a form of Avian Cholera of which there are four types, *viz.* the rapidly acute, killing in a few hours; acute, where a bird lives two or three days; sub-acute, where a bird lives from one to several weeks; and chronic, in which a bird gradually wastes away and is said to be "going light." No doubt the above bird died in the acute phase, where infection remained latent, some cause such as indicated above coming into play. The disease is the bane of bird-keeping, whether the birds are domesticated or semi-domesticated, and it accounts for the greatest mortality among poultry and cage-birds in this country. It is often confounded with Bird Plague, due to an organism invisible under the microscope. The latter is a truly contagious disease, causing a heavy death-roll, and is introduced by birds which have at some period of their life survived an attack of the disease in dealers' cages, etc.

As far as Avian Cholera is concerned, the term is frequently a misnomer as there is often no diarrhœa, but nevertheless all the forms are due to the same organism which varies in virulence, the course being altered by such circumstances as changeable weather, not settled dry cold or hot weather.

The best way to prevent mortality from this disease is by the adoption of measures of scrupulous cleanliness and the disinfection of cages, etc., and the removal of a bird as soon as anything is noticed amiss, care being taken that it receives suitable shelter. When the disease occurs in the chronic form one may try Sulphuric Acid and Iron Sulphate in the drinking water. Aviaries should be kept dry and well sheltered. There is nothing much to be done in the rapidly acute and acute forms.

Birds recovered from the disease should be isolated for some weeks, because although being well themselves they are still infectious to others.

The Genus Spermophila.

By Wesley T. Page, F.Z.S.

(Continued from page 146).

19. *S. nigrorufa.*

Adult male: Top of head and back to rump, black, with the feathers of the mantle, back, and scapulars, obscurely tipped with ruddy-buff; rump, ruddy-cinnamon; wing and tail feathers black edged with whitish-brown; the bases of the middle primaries are white, and the middle secondaries have their edges somewhat hoary; loral streak, white; eye region, black; sides of neck, ear-coverts, cheeks and throat, buffish cinnamon, lightest on the sides of the neck; the under surface is principally buffish-cinnamon, darker and brighter on on the breast, sides and flanks; beak, blackish; legs and feet, dark-brown. Total length $3\frac{7}{8}$ in., tail $1\frac{1}{2}$ in.

Adult female: Above, brown, mottled with darker brown on the back, and slightly tawny on the rump; wings blackish-brown, edged with lighter brown; base of middle primaries, white; margins of middle secondaries, whitish; upper tail coverts and tail, brown, edged with lighter brown; top of head, brown, minutely mottled with dusky; under surface, yellowish buff, paler in the sides and flanks.

Habitat: Bolivia and Brazil.

THE BLACK-CAPPED FINCH.

20. *S. pileata.*

Adult male: Upper surface, pale brown, much mottled with obscure blackish centres and light ashy margins to the feathers: rump, tawny-brown; wings, blackish, edged with pale brown; secondaries margined with whitish, and inner primaries white at the base of outer webs, forming a prominent white patch; upper tail-coverts and tail feathers dark brown edged with paler brown, with whitish tips; crown, nape, and lores, black; under surface, pale reddish, darker on the sides and flanks; centre of abdomen, white; under tail-coverts pale reddish. Beak, horn colour, darker at the base; legs and feet, greyish-brown. Total length $3\frac{7}{8}$ in., tail $1\frac{1}{2}$ in. Habitat: Brazil.

THE COLLARED FINCH.

(BLACK-BREASTED GROSBEAK. *Lath*).

21. *S. cucullata.*

Adult male: Crown of the head, nape, neck, mantle, upper and middle back, black; lower back, ashy, tinged with ochre; a band of ochre crosses the rump;

upper tail-coverts and tail feathers, blackish, the former edged with brown, the latter broadly with ashy ; wings, blackish, lesser and median coverts edged with ashy and tipped with ochre, primaries and quills edged with ashy, secondaries edged with hoary-grey, middle primaries white at the base of outer webs, forming a large oblong patch ; eye region and ear-coverts, black ; loral spot, patch under eye, cheeks and throat, pale buffish-ochre ; sides of necks, bright ochre ; a broad black band crosses the fore-neck ; remainder of under surface, tawny buff, darker on the under tail-coverts ; beak, pale horn, darker at the base ; legs and feet, brown. Total length 5 in., tail 2 in.

Adult female : Differs from the male, being mostly brown on the upper surface, tinged with olive on the head and back ; wing coverts and quills edged with dusky ; tail, dark brown, with paler edges ; under parts, pale tawny buff, lighter on the abdomen and darker on the under tail-coverts.

Habitat : Brazil and Guiana.

Sub sp. A. *S. polionota.*

"Adult male : Similar to *S. cucullata*, but wants the "ochreous buff on the underparts, rump, and sides of neck, all "of which are whitish ; lower back and thighs, ashy-grey. "Total length 4½ in., tail 1⅞ in." (B. M. C., Vol. XII.)

Adult female : According to the Mus. Cat. she is similar to *cucullata*, but more sandy on the upper surface ; ear-coverts, pale olive-brown ; sides of neck and under surface, pale yellowish buff, more tawny on the abdomen, flanks, thighs and under tail-coverts.

Habitat : Brazil.

THE BLACK-HEADED FINCH.

22. *S. melanocephala.*

Adult male: Crown of the head, nape, neck, mantle and back, black; rump, rufous-chestnut; wings and tail, black, the former edged with brown, and the latter with ashy; lesser wing-coverts, rufous-chestnut; throat, white; breast band, black; under surface, pale rufous-buff, darker on the flanks and ventral region; beak, blackish; legs and feet, black. Total length 5 in., tail 2in.

Habitat: Argentina, Bolivia, S. Brazil.

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23 *S. torquela.*

Adult male: Crown of the head, lores, sides of the face, ear-coverts, back, wings, tail, and upper tail-coverts, black; there is a white wing patch at base of middle primaries; coverts tipped with buff, and tail feathers fringed and tipped with pale brown; lower back and rump, pale cinnamon; the side of each neck is adorned with a patch of white, and a black band crosses the neck; remainder of under surface, tawny, with a rufous tinge; beak, blackish horn; legs and feet, blackish. Total length 4¾ in., tail 2 in.

"The *seasonal plumage of the adult male* is brown; all "the black feathers of the upper surface having sandy-brown "edges, which are doubtless shed at the breeding season; the "white patch at the sides of the neck is also tinged with "sandy-buff."

"The *young male* resembles the adult male in seasonal "plumage, being brown instead of black. At first the black "collar on the fore-neck is altogether absent, and when "assumed it is much narrower than in the adult male. The "reddish colour of the under parts is also much paler." (B. M. C., Vol. XII.)

The adult female differs from the male, being principally light olive-brown above, and same colour below, but much paler; the principal wing feathers and also those of the tail being dusky-brown, edged with pale olive.

Habitat: Mexico.

24 *S. albitorquis.*

"Adult male: Similar to *S. torquela*, but distinguished by "a white collar round the hind neck. Total length 4·4 in., "tail 1·85 in." Habitat: Mexico. (B. M. C., Vol. XII.)

The Spectacled Finch.

25 *S. ophthalmica.*

Adult male: Crown of head, nape, lores, sides of face, ear-coverts, mantle, back, wings and tail, black; the feathers of the lower back and rump have the bases grey, merging into black, with the tips pure white, giving a mottled whitish-grey surface; lesser coverts edged with white; the greater coverts with a white streak at the ends; primaries and quills with white bases, obscured on the latter, but forming a distinct oblong wing patch on the former; cheeks, throat, sides of neck, breast, abdomen, white slightly mottled with black on the sides and flanks; a broad black band crosses the foreneck, and there is a tiny spot of white below each eye. Total length 4 in., tail 1⅝ in.

Adult female: Differs considerably from the male, being light brown above; tinged with ashy on head and mantle; wings and tail, blackish; under surface, paler than the upper surface and slightly tinged with yellowish; centre of abdomen, white.

Habitat: Ecuador.

THE LINEATED FINCH.

(RADIATED GROSBEAK. *Lath.*)

26. *S. lineata.*

Adult male: Crown of the head, nape, lores, sides of face, ear-coverts, mantle, back, and upper tail coverts, glossy black, with a greenish sheen; lower back and rump, mottled with ashy-grey; wing coverts, quills and tail-feathers, black; median and greater feathers, tipped with white; inner primaries, white at base of inner web; tail feathers narrowly tipped with ashy; cheeks, tiny spot below each eye; throat, sides of neck, centre of breast and abdomen, and under tail coverts, white; sides of body and flanks ashy; band across foreneck and sides of breast, black. Total length 4½ in., tail 1⅞ in.

Adult female: Principally olive-brown; slightly fulvous on the rumps; wing-coverts, quills and tail-feathers, dusky brown, edged with paler brown; under surface, yellowish-buff; centre of breast and abdomen, whitish; sides and flanks, washed with brown.

Habitat: According to Mus. Cat., Guiana and Amazonia.

27. *S. moreleti.*

Adult male: Black on the upper surface; with a broad band of white across the rump; wing-coverts, tipped with white; base of inner primaries, white on the outer web; whole of the head, black; throat, sides of neck, and under surface, white, slightly tinged with yellowish-buff below the breast; a broad black band crosses the foreneck. Total length 3⅝ in., tail 1⅝ in.

Adult female: Dull yellowish-brown, slightly washed with olive on the upper surface; greater and median wing coverts tipped with yellowish-white forming a double wing-bar; lores and eye region, whitish-ochre; ear-coverts and sides of neck, fulvous-brown; under surface, buff tinged with ochre.

Habitat: Texas to Mexico (B. M. C., Vol. XII.)

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28. *S. parva.*

Adult male: Crown of the head, nape, mantle, back, wing, upper tail coverts, tail, lores, sides of face, ear-coverts, and band across neck, black; lower back and rump, brown; cheeks, throat, sides of neck and under surface, white; tinged with yellowish below the black neck band, the yellowish being more pronounced on sides, flanks and ventral region; the middle primaries and secondaries have the base of the outer webs white, forming a double wing patch, (the latter is not visible when the wing is closed). Total length 4 in., tail $1\frac{5}{8}$ in.

Adult female: Fulvous-brown above, lightly washed with olive; under surface, pale yellowish-buff; sides of face, yellowish-white; double bars of yellowish-white cross each wing; wing-coverts and tail feathers, brown, margined with paler brown.

Habitat: According to Mus. Cat., Texas to Mexico.

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33. *S. aurita.*

Adult male: Crown of the head, nape, mantle, back, wings, upper tail-coverts, tail, lores, sides of face, ear-coverts, cheeks, throat and upper breast, glossy black, with a greenish sheen; a half-moon shaped patch on sides of neck, and an irregular band of white across the rump; a double white patch at the base of the primaries and secondaries, only the former being visible when the wing is closed; sides and flanks, irregularly mottled with black. Total length 4⅛ in., tail 1¾ in.

"In some males the white spot on each side of the neck is "connected by a white band across the lower throat, and the "base of the chin is white; the lower back and rump are also "white, forming a broad band. Between this and the form "described there is every intermediate link in the Salvin-"Godman collection—as, for instance, a male with a white "throat band and the rump black; another with the rump "white and entire throat black, with scarcely any sign of the "white neck patch; another with a white band on the throat, "the neck patch obsolete, and the rump marked by a few "white-tipped feathers. How these variations have been "brought about, whether by hybridisation or not it is "impossible to determine, but I quite agree with Messrs. "Salvin and Godman that only one species can be recognised." (B. M. C., Vol. XII.)

The adult female is olive-brown above, and pale buff tinged with olive on the under surface; pale yellowish on the abdomen; wing- and tail-feathers brown, edged with olive. She is slightly smaller than the male. Habitat: Central America.

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34. *S. luctuosa.*

Adult male: The whole of the upper surface, head, neck, chest, sides of body and flanks, black; breast, abdomen and under tail-coverts, white; a white patch at base of middle primaries, forming an oblong wing-patch; beak, upper mandible whitish-grey, lower mandible, washed with leaden-grey; legs and feet, greyish. Total length 4¾ in., tail 1⅝ in.

The adult female is olive-brown above, darker on the rump and upper tail-coverts; wing- and tail-feathers, mostly brown, edged with olive; lores and eye-region pale buffish-ochre; ear-coverts, light-brown, with whitish shaft streaks; cheeks, throat and under parts, fulvous-brown; sides and flanks, washed with olive; centre of abdomen, whitish; beak, upper mandible pale brown, lower dark grey; legs and feet, greyish.

Habitat: Colombia, Ecuador, Peru and Bolivia.

35. *S. corrina.*

Adult male: The plumage is entirely black, save for the patch of white at the base of the middle primaries, and the breast marred with a few white feathers, Total length 4½ in., tail 1⅞ in.

The adult female is olive-brown above; wing-coverts and quills, dusky-brown edged with olive; tail-feathers, brown with olive margins; under-surface, paler olive than the upper surface.

Habitat: Central America.

36. *S. bicolor.*

Adult male: Upper surface, black; cheeks and under surface, white; white wing-patches at the base of the middle primaries and secondaries, and also white spots at the ends of the median and greater coverts and tail-feathers. Total length 5½ in., tail 2⅛ in. Habitat: Bolivia.

Practically the whole of the above species are hardy (that is, of course, speaking of those which have been imported), and excepting the White-throated Finch, are amiable and may safely be trusted in a mixed series of small birds. Many of the rarer kinds, such as some of the coloured figures illustrating this article, and many others are decidedly handsome birds; and in spite of the lack of brilliant colours, there are but few of them to which the designation plain can be applied. Add to this the fact that, so far, only *S. albigularis* has been bred in this country, their great interest to aviculturists will be at once apparent.

In conclusion, I must state my indebtedness to the British Museum Catalogue and also to Sclater and Hudson's Argentine Ornithology.

Editorial.

A Fine Collection of Birds: Our Hon. Treasurer, Mrs. K. Leslie Miller, has certainly solved the problem how to keep birds happy, contented and healthy in cages. The series consists of 32 rare and choice birds, and on the occasion of my visit they were, with two or three exceptions, all in Show condition. The following list will give some idea of the beauty and rarity of her collection.

Male Green Singing Finch—*Serinus icterus.*
Male Melba Finch—*Zonogastris melba.*
Pair Parrot Finches—*Erythrura psittacea.*
Male Crimson Finch—*Neochmia phaeton.*
Male Sydney Waxbill—*Ægintha temporalis.*
Pair Blue-breasted Waxbills—*Estrilda angolensis.*
Male Violet-eared Waxbill—*Granatina granatina.*
Pair Zebra Waxbills—*Sporæginthus subflavus.*
Male White-eared Conure—*P. leucotis.*
Pair Many-coloured Parrakeets—*Psephotus mutticolor.*
Pair Red-vented Blue-bonnet Parrakeets—*Psephotus hæmatorrhous.*
Male Hawk-headed Caique—*Deroptyus accipitrinus*
Dusky Parrot—*Pionus violaceus.*
Pair Ceylonese Hanging Parrakeets—*Lorriculus indicus.*
Pair Passerine Parrakeets—*Psittacula passerina.*
Pair Yellow-backed Lories—*Lorius flavopalliatus.*
Female Forsten's Lorikeet—*Trichogtossus forsteni.*
Male Swainson's Lorikeet—*Trichoglossus novæ-hollandiæ.*
Male Nonpareil Bunting—*Cynospiza ciris.*

Male Yellow-winged Sugar-bird—*Cœreba cyana.*
Male Gold-fronted Bulbul—*Chloropsis aurifrons.*
Male Superb Tanager—*C. fastiosa.*
Male Yellow Tanager—*C. flava.*

I would fain linger and have a little to say about the lovely plumages of the Sydney Waxbill, Tanagers and others, also the handsome and roomy cages; while their cleanly condition bespoke strict and constant attention, for with some of the species it must have meant cleaning out several times a day to secure the almost spotless cleanliness that prevailed. I hope Mrs. Miller will be prevailed upon to give us accounts of some of them a little later. She is to be congratulated upon a rare and choice series of birds. I certainly never saw birds in better condition, whatever the conditions (*i. e.* indoors or out, cages or aviaries) they had been kept under.

A Rare Consignment of Neotropical Birds.

It was my privilege to see this unique consignment before any were distributed. Mr. E. W. Harper, who has so often introduced many rare, unique and interesting species to aviculture, has again, within the past month, brought to hand another consignment of rare species, nearly all of which are new to Aviculture. They are certainly well worth a brief notice and description.

The Black-cheeked Tanager.

Calliste cayana.

A beautiful species, and imported as living specimens for the first time to this country. The upper surface of the male is glistening coppery yellow; top of head, ruddy copper colour; sides of face, black; wings and tail, blackish-brown, edged with bluish green; the under surface is bright ochraceous; throat and fore neck, dark blue; bill, black with a bluish sheen; legs and feet, dark brown. Total length, $4\frac{7}{8}$ inches; tail, $1\frac{7}{8}$ inches. Female similar as to colour areas, but hues of her plumage much more subdued. A rare and exquisite species. Described from life, measurements from skins.

The Maroon Tanager.

Rhamphocœlus jacapa.

This fine species has been on view at the Zoo for the past two years, but until now has not previously been obtainable by aviculturists. This bird is already described in "Housing and Keeping Foreign Birds," so I briefly say: The upper surface is velvety black with a crimson sheen; head, neck, and breast, rich crimson-maroon, passing into black on the abdomen and ventral region. New to aviculture. Total length 6½ in., tail 2⅛ ins.

RED-BREASTED MARSH BIRDS.

Leistes guianensis.

Very similar in form and build to a Cowbird, but a little larger and also a little longer on the leg. A pair of these are now disporting themselves in my aviary and have a very fine appearance. Male: Rich velvety brownish-black; bend of wing and body from throat to middle of abdomen, glowing scarlet; bill, black; legs and feet, deep brown. Total length 6½ in., tail 2⅝ in. Female: Above, pale brown striated with black; below, pale brown, washed with scarlet on the breast and middle of abdomen. New to English aviculture.

THE GOLDEN HANGNEST.

Icterus xanthornus.

An account of this bird, which is new to English aviculture, appeared in one of the earlier issues of the "Bird World," together with a photograph of the nest. Only one specimen was brought over, and by the generosity of Mr. Harper this now enriches my collection. It is a typical bird as to form and one of the smallest species, but it is far more beautiful than the well known Baltimore Hangnest. With the exception of the centre of the throat, which is black, and wings, dark olive, narrowly margined with white, and tail blackish olive; it is rich shining yellow, slightly washed with greenish on the upper back. Total length 7½ in. Its native name is Plaintain Eater. New to English aviculture.

THE LESSER BLACK WOODPECKER.

Melanerpes rubifrons.

This was a most interesting bird, having been hand-reared, it was very tame, made no attempt to fly away, and crawled over you, tapping with its bill the while. Its plumage was principally black, with a scarlet cap. This so interested me that I afterwards wrote for it, only to hear that it was *non est;* it had been injured, presumably pecked by the Trumpeter-bird, which also had its liberty during the voyage.

TRUMPETER-BIRD.

Psophia crepitans.

This was another most interesting bird, somewhat like a miniature Crane, but more dainty in appearance, and a somewhat mincing gait. It was very tame and followed one about like a dog. Its plumage was longish and hung very gracefully.

DWARF GROUND-DOVES.

Chamæpelia griseola.

A pretty and interesting species, new to aviculture, though the Zoo have had a pair on view during the past year, one of which was presented by Mr. Harper. These birds have laid eggs in their cage. They are slightly smaller than the well known Diamond Dove, but stouter in build.

THE SPERMOPHILA,

which have already been described in our pages, consist of three species, *viz.* the Fire-red, the Lavender-backed, and the Black-headed Lined Finch, being all very handsome little birds. The other species I can only give a list of; all were in very good health, and speak well for Mr. Harper's skill in getting them through the difficult period of the voyage.

Hawk-headed Caiques (pair), Guiana Lovebirds (*P. guianensis*), Dusky Parrot (*Pionus fuscus*), Black Hangnest (*Cassidix orizivora*) a very fine specimen, Grey-breasted Thrush (*Merula phœopygus*), Black-headed Sugar-bird female (*Chlorophanes spiza*), Thick-billed Grosbeak (*Oriziborus crassirostris*), Chestnut-bellied Grosbeak (*O. torridus*), and Yellow Conure (*Conurus solstitalis*). Exigence of space alone has prevented me commenting on the above interesting species, many of which are now available to English aviculturists for the first time. We shall probably get descriptions later, as some of them have come into the possession of our members.

Birds at the Zoo: Foreign birds were never better represented at the Zoo than they are at present, nor better cared for though some of the methods of treatment may not commend themselves to aviculturists. There has been a large influx of American Birds, of special interest, owing to the export of birds from the U. S. being prohibited.

Kingbirds—*Tyrannus tyrannus.*
Brown Mock Thrush—*Harporhychus rufus.*
*Blue Mocking Thrush—*Melanotis cærulescens.*
*Cuban Mocking Thrush—*Mimocichla rubripes.*
*Wood Thrush—*Turdus mustelinus.*
*Wilson's Thrush—*Turdus fuscescens.*
*Water Thrush—*Sciurus novebonacensis.*
American Blue Jays—*Cyanocitta cristata.*
Fox Sparrow—*Passerella iliaca.*
American Tree Sparrow—*Spizella monticola.*
*Song Sparrow—*Zonotrichia melodia.*
White-throated Song Sparrow—*Z. albicollis.*
Chipping Sparrow—*Spizella socialis.*
*Field Sparrow—*S. pusilla.*
Catbird—*Galeoscoptes carolinensis.*
Indigo Bird—*Cyanospiza cyanea.*
Pine Siskin—*Chrysomitris pinus.*
Snow Bird—*Junco hyemalis.*
Purple Finch—*Carpodacus purpureus.*
*Yellow-eyed Vireos—*Vireo olivaceus.*
*Yellow Warbler—*Dendroica æstiva.*
*Phœbe Flycatcher *Muscicapa phœbe.*
*Meadow Lark—*Sturnella magna.*
American Robins—*Turdus migratorius.*
*Black and Red Tanagers—*Pyranga erythromelas.*
*Black-capped Titmice—*Parus atricapillus.*
Rose-breasted Grosbeak—*H. ludovicianus.*
*Oven-Birds—*Dendroica discolor.*

Others are White-headed Sea Eagle, Turkey Vultures, Virginian Eagle Owl, Barred Owl, American Crows, Great American Heron, *Ward's Heron, *Montezuma Quails, Red-Billed Tree Ducks, Sulphur-crested Toucan, Purple Grackle, and Baltimore Hangnests; and also specimens of Canadian, White-fronted and Brent Geese.

Other interesting arrivals are 2 Dumont's Grackles (*Mino dumonti*) from Aru Islands. These at present are so wild, that careful observation is difficult; the general body plumage is glossy black, with a greenish and purplish sheen; sides of crown and sides of face, mostly yellow, which is also the colour of the bill, legs, feet and abdomen. Salvadori records these Grackles as being very quarrelsome, and also very common in New Guinea.

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* New to the Collection.

The following have reared young: Senegal Dove, 2; Brush Bronze-wing Pigeon, 2; Wonga Wonga Pigeon, 2; Turtle Doves, 7; Crested Pigeon, 4. The Silver-eared Mesias hatched out 3 young, unfortunately they were killed by the Pheasants occupying their enclosure. Meyer's Pigeons laid, but eggs were clear. The Redshanks, which were noted in July issue as having hatched out, are now almost full grown and scarcely distinguishable from the adults. They are fed on chopped mealworms, meat, egg and crissel.

A New Hybrid: In my aviary I have had, by the chance pairing of two odd birds, an interesting hybrid reared, viz., Bronze-wing × Magpie Mannikin. It is about seven weeks old and can fend for itself. At present as to size and form it shows more of the Bronze-wing, but its plumage is of a very nondescript appearance, being dark umber brown above, suffused with chocolate on the upper back, and a lighter umber brown below; the sides of the body are slightly suffused with a yellowish-brown. Its appearance will be greatly altered as soon as it assumes adult plumage, as there is sure to be a fair amount of white in same. I believe two were hatched, but they left the nest while I was away on my holidays; I was told on my return that a young bird had died, which was put on a garden seat for a moment while the birds were fed, and a cat took it, and I surmise it was the missing Mannikin hybrid.

Mortality among Newly Imported Foreign Birds: So many complaints reach me on this subject, that I feel called upon to make some comment. In some cases certainly bad housing and packing by the dealer have been as much responsible for the mortality as the conditions of importation. It seems to me, we aviculturists have the matter in our own hands, if we only conform to conditions somewhat as under:

1. To strictly refuse to trade with any dealers whose shops are insanitary, and whose conditions of caging etc. approach cruelty, *i. e.* either by smallness of cage, uncleanliness, or overcrowding.

2. Whose system of packing and despatching is open to the same charge.
3. By reporting any case of cruelty from any cause to the Society for Prevention of Cruelty to Animals.

By these means we should help the honourable dealer and also do something towards stamping out the suffering among birds, caused by some ruthless and brutal traders A case was brought to my notice this week, which was simply brutal, and as a consequence but two survived out of a dozen, and it is very doubtful if one of these will live. I have no hesitation in ascribing this to *brutal* packing. It is simply the duty of aviculturists not to pass such cases by.

Breeding of Chingolo Sparrow: Just on going to press I learn that our member, Mr. Teschemaker, has successfully reared two young of this species, after many vain attempts. Members are referred to the photo of nests and eggs of this species in April issue of current vol. This is a very rare occurrence, though I think they have been reared once before in this country.

Toucans: In our last issue in my notes on these birds, by almost inexcusable carelessness, I placed the vulgar name Sulphur Breasted over *R. tocard*, whereas it should have appeared over *R. carinatus*.

Post Mortem Reports.

(*Vide Rules*).

R. HOLLINS, Preston, and E. S. CHAPLIN, Amwell, answered by post.

J. N. WILSON.—The cause of death of young Rosella was septic fever, brought about by infection on the one hand and exposure to changeable weather on the other. No doubt in your particular case there is an inherent predisposition in the young birds. Septic fever is not the same disease as bird plague, which is very highly contagious and due to an invisible and filtrable microbe. These two diseases are confounded with one another.

O. MILLSUM.—Olive Tanager. Cause of death: Inflammation of lungs due to climatic changes.

Mrs. MELLOR.—Green Budgerigar (hen). Cause of death: Inflammation of lungs and bowels, probably brought about by chill acting on the system when depressed by fretting.

NOTE.—During the last two years a great number of birds have died, and their deaths could only be attributed to climatic changes as extraneous infection was out of the question, birds having died in aviaries into which no fresh birds had been introduced for months.

T. WILSON.—Pennant Parrakeet, in full colour, aged two years. In my opinion this bird died from infection obtained from the soil of the aviary, the disease being brought into activity partly by the moult and partly by the changeable weather. The bird, which was a cock, was somewhat emaciated, evidenced by sharpness of the breast bone, and had evidently been ill some days. (See "Notes on Avian Cholera," page 181).

HENRY GRAY, M.R.C.V.S.

MRS. E. WARREN VERNON AND HER PET NIGHTJAR.

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[OCTOBER, 1907.

BIRD NOTES:

THE JOURNAL OF

THE FOREIGN BIRD CLUB.

The Nightjar.

(*Caprimulgus europæus*).

By Mrs. E. Warren Vernon.

I do not suppose many of our members have kept this fascinating, but at the same time peculiar bird as a pet.

To accurately describe him, imagine an old bough of an oak, with the sun flickering on it through the leaves, and you have the idea of the Nightjar's colour. A marvellous mixture of warm chocolate browns, greys, and black. Size, about a Cuckoo's; enormous black eyes, which he squints in a horrible fashion when taking his food. At present he is still a baby, and is fed at dusk and dawn, no food in the day at all. He sleeps and doses in the sun, flattening his body and wings to get all the warmth he can, and is like a stuffed specimen during the day light. Directly evening comes, he opens his great eyes and I let him out, that is to say, I offer him my hand, and he condescends to come on to it, and be taken out of his cage. He then sits on the top of the cage and will proceed to run backwards and forwards and uttering a harsh cry. If I offer him a mealworm, moth, or daddy long legs on the end of a blunt pin he flies up in the air and takes it off. His mouth is enormous when open, like a large frog's; when closed he has a tiny beak, and no one would imagine what a shock it gives the first time you see a Nightjar open his mouth. Should the food not be to his liking he spits it out, but I have found by offering him a spoon with mealworms and soft food mixed he will take it down like we do. Of water he takes very little, but I have got him to drink from a spoon after his meals.

His flight is absolutely silent, more like a Hawk's, and he is rather like one altogether when flying. His feet are tiny and he does not grasp the perch, but sits on it like a Swallow. He has a fly morning and evening, always coming back to the top of his cage for food. He is very tame and lets me hug and cuddle him, never resenting it at all. I can thoroughly recommend him as a most curious and interesting pet.

He is largely found in India, also in Ireland, as well as England. He makes a most curious noise elongating his throat, and opening his immense mouth if at all frightened. He specially dislikes two Marmozets I have, and bobs up and down at them, screaming all the time.

I first saw a Nightjar at Mr. Galloway's at Reading. He had a very tame one that flew round his garden in the evening, returning to him, and he got me this specimen.

[The Nightjar is one of the, if not the, latest of our summer migrants to reach this country, and it is also early to take its departure, usually leaving us early in September. Mr. Howard Saunders states in his Manual that it has been known to remain till November in the mild South-west of England. Mr. Saunders also notes the fact that they do not attempt to feed themselves in confinement, and that they are also known by the following vulgar names: Goat-sucker, Night-hawk, Dor-hawk, Fern-owl and Churn-owl.—Ed.]

Nesting of the Black Tanager

(*Tachyphonus melaleucus*),

and the Violet Tanager

(*Euphonia violacea*).

By W. E. Teschemaker, B.A.

Having been commanded by our Editor to contribute some notes on the nesting of Tanagers, I have selected the above two species, the former of which nested in my aviaries in 1906 and the latter this season.

On the Continent several species of Tanagers have been successfully bred (e.g. the Many-Coloured and the Scarlet) but in this country very little seems to have been done. Of course Tanagers are not everybody's fancy, and they have only recently been kept in out-door aviaries. In the early days of aviculture they were kept for the most part in small cages at a high temperature, under which condition they seldom survived very long. Even the late Aug. Wiener, with his great experience and skill, failed with Tanagers. Undoubtedly some aviculturists succeed in keeping some Tanagers in good health in cages, but I must frankly confess that I cannot do so, and I would not recommend anyone to try the experiment.

The conditions essential to success are, I think: (1) To have your birds well wintered and in robust health at the commencement of the breeding season; (2) To get them thoroughly tame; (3) A fairly large aviary with some growing shrubs; (4) A fine warm summer. I lay stress on this last condition because, although I succeeded with the only pair I turned out in the fine summer of 1906, this year out of four pairs only one made any attempt to nest. No doubt this was partly due to the fact that, owing to severe illness, my Tanagers received very little attention this summer, but chiefly I attribute it to the cold and inclement weather.

I will not go into any details as to the management of Tanagers partly from lack of space, but chiefly because everyone has his own methods, which experience has taught him are the best in the special conditions of his own aviary. Let us first discuss

THE BLACK TANAGER.

This species was rather freely imported in the spring of 1906. I saw nearly twenty males in one consignment. For some unexplained reason they did not prove popular and I was able to purchase one for a very few shillings. I was rather lucky in picking up a hen from another dealer—the only one I have ever seen.

Personally, I think this a very charming species. The handsome plumage of the male (indigo black with pure white shoulder patch) and the graceful shape of both sexes, together with their sprightly ways and quaint vivacity render them, to my mind, far more desirable than other more brightly coloured species which, even in an aviary, will be found somewhat sluggish.

The Black Tanager is always in motion, and with his long pointed wings you will find him, in a large aviary, almost as active and graceful as a Swallow. True, he is somewhat of a bully, but you are not likely to have any trouble with him on that account, except just in the breeding season, and then only if he is associated with birds much weaker than himself.

My Black Tanagers were turned out in an aviary 14ft. long, 10ft. deep, and only 6ft. 6in. high at the end

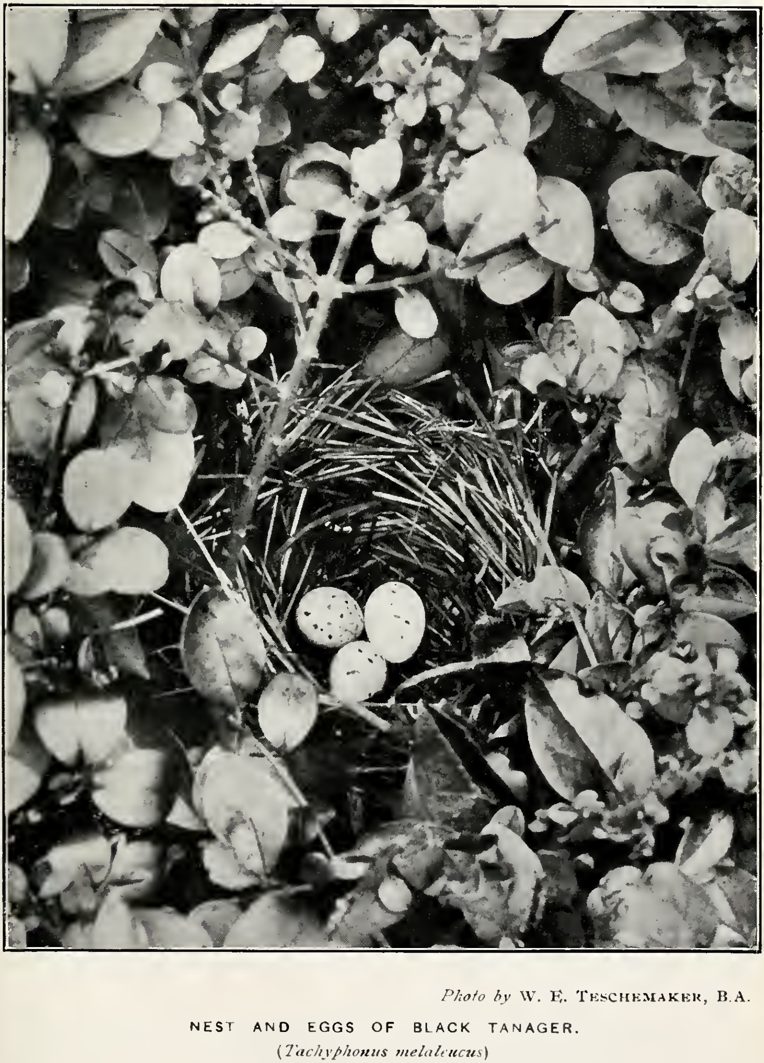

Photo by W. E. Teschemaker, B.A.

NEST AND EGGS OF BLACK TANAGER.

(*Tachyphonus melaleucus*)

of March. There was a small covered house in the aviary, but they did not make any use of it, for all Tanagers (if in good health) insist upon roosting in a shrub, if there be one, no matter how cold the weather or how warm the shelter provided for their benefit.

On the 14th of June the hen began to construct a nest of hay and grass stems in a thick privet hedge. The nest was so deep as to entirely conceal the bird when sitting except just her tail. The photograph does not give a good idea of the depth of the nest, partly because it was taken from above, and partly because, at the time when it was taken, the sides of the nest had become somewhat flattened by use.

The three eggs were laid on consecutive days and incubation lasted for thirteen days. The young were very small and covered with black down. For the first week they got only live insect food, but after that they were fed partly on fruit (chiefly bananas). The male bird took no part in incubating the eggs, but was most diligent in carrying food to the young, and also in driving away any other birds from the vicinity of the nest, in the performance of which duty he killed one of my Roller Canaries and an Ortolan Bunting.

The strongest youngster left the nest on July 13th, and both were very soon able to pick up for themselves.

I gave these two young birds to Dr. Butler, who kept them for some time but did not succeed in bringing them through the moult. From the above account it may be inferred that the only trouble I had with this species arose from associating it with smaller birds at the nesting time—a mistake I should not make again with any kind of Tanager.

THE VIOLET TANAGER.

In the Violet Tanager we have a most complete contrast in every way to the Black. Whilst the latter is a shy and somewhat distrustful bird, a poor songster and to some extent insectivorous, the former is most phenomenally tame and familiar, has a charming song and is almost exclusively frugivorous.

Again, whilst the Black is hardier than any member of the family I am acquainted with, except possibly the Scarlet, the Violet has the reputation of being exceedingly delicate. Dr. Russ says that it never lived long enough with him to give him a chance of breeding it. I must say that this has not been my experience of the species. I have had altogether one male and four females. The male lived a year in an outdoor aviary, and during that time I never knew him to ail. Day after day in this chilly summer, and even in the depth of an exceptionally cold winter, he used to sing most delightfully and was always full of life and spirits. One hen was killed by an accident, and another died from some form of lung trouble. The remaining two I still have.

I think very often when we say a species is delicate, what we really mean is that the conditions under which we keep it are not suitable for it. For instance, the Golden-crested Wren is regarded as far too frail to be confined in a cage, but can anyone call this little bird, which actually crosses the North Sea in thousands, delicate? As a matter of fact it must be a 'pocket Hercules'! I think if we wish to succeed with this Tanager we must keep it in a large outdoor aviary, giving it unlimited exercise, and induce it, or

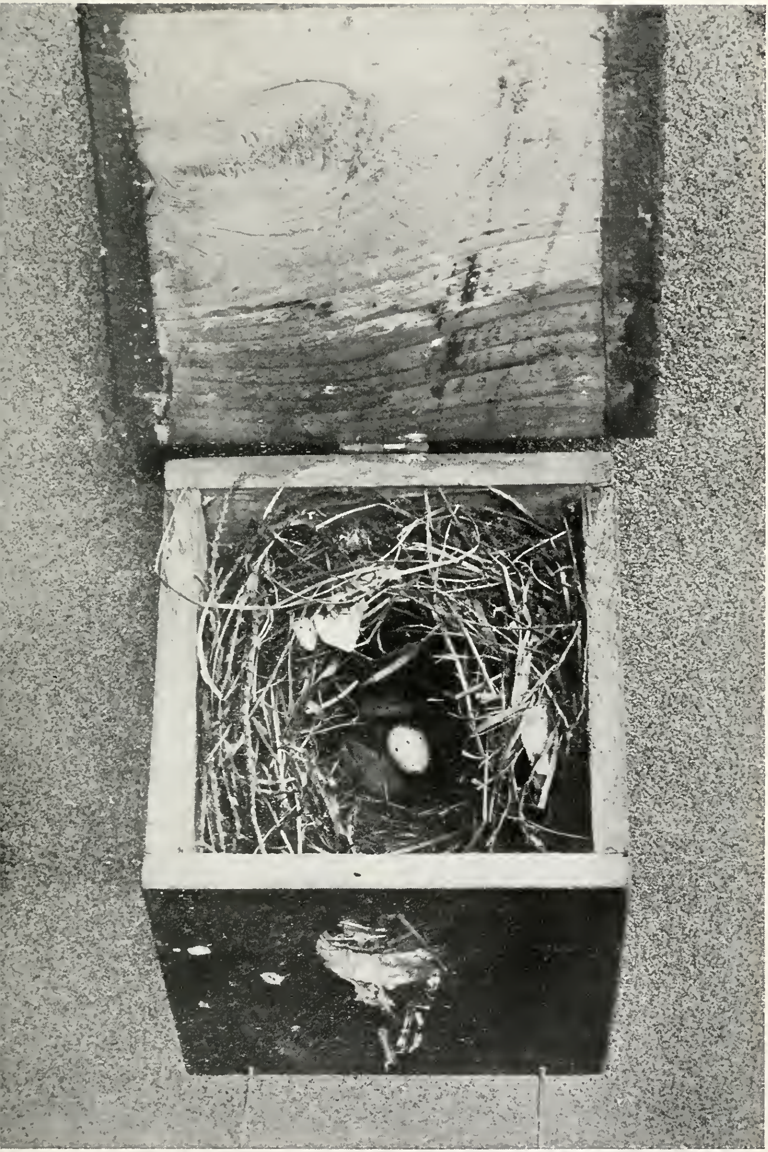

Photo by W. E. TESCHEMAKER, B.A.

NEST AND EGG OF VIOLET TANAGER.
(*Euphonia violaceo*).

compel it, to roost at night in a warm covered house. Under these conditions it will flourish.

I said above that the Violet Tanager is almost entirely frugivorous, but this is not quite a correct statement of fact, for I find that it is very fond of slugs, and in particular of that large black variety of garden slug, which I have never seen any other bird whatever attempt to touch. It has a curious method of devouring them. Not having apparently any prehensible power in its feet, it carries the slug in its bill to a convenient perch and, laying it carefully across the latter, proceeds to gently nibble and swallow portions of the interior. It continues this process for a long time with much apparent relish, never once withdrawing its beak (in which case of course the slug would fall to the ground); but the process cannot be at all pleasant for the slug.

One of the hen Tanagers was quite ready to pair in the Autumn of 1906, but no nest was built. In February of this year, however, the male bird began to build with the greatest possible energy and industry. The site he selected was a wooden nest box, and the nest was a spherical one with an arched roof (see plate). In order to secure a photo of the interior it was necessary to cut through the domed roof with a pair of scissors, but a close inspection of the print will show that the nest is a spherical one. Depth of nest 3¼ inches; diameter of cup 2⅛ inches. As the majority of Tanagers build open nests this is not quite what one would expect; but, as I have now seen two nests of the Violet Tanager, built by different birds under my own eyes, I have no hesitation in assuming (though I have no work of reference on the *Tanagridæ* at hand) that the Violet Tanager either nests in a hole in a tree, or, if it builds in the open, it at all events constructs a spherical nest like that of our Common Wren or Long-tailed Titmouse.

The most diverse kinds of materials were utilised by the male bird—leaves, paper, moss, and small sticks, with the usual hay, and he continued to work away at it for a fortnight, singing most vociferously in the intervals of his labour. The hen meanwhile flew to and fro with her partner, and in and out of the nest, but she carried no materials and took no part in the construction, in fact she was evidently not quite ready to breed as yet.

I saw no further nesting until April, when all at once the hen commenced to build another nest in a similar nest box but in a different part of the aviary. The nest was exactly similar in construction. And now most unfortunately, just at this critical time, the male went off colour. He did not seem exactly ill, but he ceased to sing and was evidently not in breeding form. I have a note under date April 23, that I had to remove the other hens as they were being badly persecuted by the breeding pair.

My last note is dated May 2, and is to the effect that the Violets were pairing on that day. Within the next few days I was taken ill and I did not enter the aviary again until the beginning of July. You may be sure that one of the first things I did was to have a look at the nest. It contained nothing; but, oddly enough, there was a spotted egg evidently of this species in the first nest (the one built by the male). I have often wondered what happened in those two months, but this chapter in the history of my Violet

Tanagers I shall unfortunately never be able to write. The male bird died in August in the moult, but this hen and another, I still have.

There are many interesting characteristics * of this species I should like to point out, but unfortunately space does not allow. I must not close, however, without drawing attention to the very remarkable song of this species. The weak warbling notes of the great majority of the Tanagers can scarcely be dignified by the name of song, but the Violet Tanager pours forth a really remarkable flow of melody. Perched high on the topmost spray of a tall shrub, with swelling throat and wings dropped and quivering, just like our English Starling, he sends forth a long continued medley of loud, joyous bubbling notes, intermixed with many quaint Starling-like phrases and with some beautiful clear flute-like tones. Were it not marred by what I have called the "Starling-phrases" the song would be really most melodious.

In conclusion, I may say that I do not think there is any insuperable difficulty in breeding the Violet Tanager. What one chiefly needs is a fine summer, and, secondly, that which is after all the chief element of success in breeding any foreign bird—a good large fluke! I mean to try again.

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* Please supply these, if only in the form of a letter.—ED.

Notes on my Aviaries and Parrakeets.

A SEQUEL.

By the Hon. & Rev. CANON DUTTON.

There was a sequel to the escape of my Senegal Parrot which may be of use to some parrot keepers. I said the bird was none the worse. That was true; but I put it into a cage with some seed, and thought it would be all right. It never occurred to me it would overeat itself, as in more than 50 years' experience, I had never known a parrot do so. But it did, and became crop bound. It seemed likely to die, and it lost flesh with great rapidity—and strength. I administered a mixture of soda, sal volatile and ginger, and worked the crop, but without much effect, then castor oil, and lastly, Epsom salts. These I gave in the middle of one night. Whether it was time or the salts I cannot say, but certainly next morning, when I expected to find the bird much worse, I noticed improvement. The salts were again administered the morning after, and then the morning after that. As the bird was moping after this last dose, we gave no more and it went on improving. We gave very little food for some time, and that only of sponge cake. I had, by the way, given doses of brandy and water when the bird was at its worst. At last, I put it back into the aviary. It could not fly very well at first, and for some time the crop stuck out. It has now resumed its normal appearance.

When the crop binding first took place, the bird tore out the feathers over its crop, so that it looked rather ragged. Now it is all smooth again, but the odd thing is that this, which was the least tame of the birds, now comes to the wire as soon as I approach the aviary and follows me about in it. I think it wants to have another fly, and so it should, if I could let it out without the others. I have no doubt it would come back in the evening.

Feeding and Acclimatising Foreign Birds.

By WESLEY T. PAGE, F.Z.S.

The title is an ambitious one: it is not my own. I have received a pressing request either to get or supply an article on this subject. I have failed to get it written, so must needs supply it myself; personally I much regret the necessity for this, as pressure on my time prevents me giving the full time and thought that the subject calls for. It appears to me that the most fitting introduction will be—

HOW I FEED MY BIRDS.

In my largest garden aviary I have over 70 birds, consisting of Grassfinches, Mannikins, Tanagers, Waxbills, Varied Lorikeets, Weavers, three species of Cardinals, Marsh Birds, Cowbirds, Liothrix, Quails, and two species of Doves; there are a fair number of rare and uncommon species among them. I think the treatment given may be taken as fairly successful, for I have only had six deaths among this group, from mid-October, 1906, to September 30th, 1907, and two of these were the result of egg-binding, while I was ill and unable to attend to them. I also think the season may be termed one of the worst known to living aviculturists without any fear of contradiction; this to my mind certainly emphasises the result. From personal experience with about 200 or more species of Foreign Birds, I have drawn the conclusion that few, if any, can be termed exclusively seed-eaters: even the Canary is not long among a mixed crew, before he or she learns to appreciate the succulent mealworm and other insects. Now for the foods supplied to this very mixed series.

INSECTILE FOOD: This mixture I vary but little, and it mostly consists of Spratt's Partridge Meal, fine crissel, dried flies, ants' cocoons, and ground silkworm pupæ; usually crumbled sponge cake is added, and at times for variety boiled potato, which has been passed through a masher. I may say the various items are used in about equal parts. To prepare: The required portion of Partridge meal is taken, and as much boiling water poured over same as is necessary to swell the meal, not sufficient to make it sloppy; the other ingredients, except the sponge cake, I keep as a stock mixture in equal parts; I take a double portion of this and knead it into the moistened Partridge meal, and if that has not been made too wet, it will be just crumbly moist. After this the sponge cake and potato is stirred into it, only enough to well mix the whole. I find this readily eaten by all soft bills, and freely picked over by the Finches, Waxbills, etc. I have never known it to go sour, and I am only able to supply once a day. I must say here, that never in my experience have I used much egg, either fresh or sterilized; for more than three years I have not used any, neither do I intend to, as I believe it to be under many conditions a dangerous food to use, even in the outdoor aviary and more so for birds in cages. My death rate has certainly been lower since I discontinued its use.

SEEDS: I supply two mixtures. (1) Equal parts of canary and white millet; (2) two parts of oats, rice in the husk, and sunflower seeds, with one part each of hemp, summer rape, wheat, dari, and small Indian corn. Millet in the ear (spray) and French* millet are also supplied. I find this meets the requirements of all; Grosbeaks, Finches, Doves, Quails, etc., and having some ground birds there is but little waste.

FRUIT: I am liberal with this and supply, according as it is in season, a good variety: Orange, banana, grapes, apples, pear, elderberries, raspberries, etc. Practically all the birds named and also Canaries take freely of the fruit supplied, at least I do not know of a single species among the above series that does not regularly take some kind or other of the fruit supplied.

GREEN FOOD: Lettuce (tender and fresh), I supply freely all the year round; in the winter I get (it is rather dear) the kind sold by greengrocers as French lettuce. It is of the drumhead variety, it is a tender and valuable food when fresh and may be safely given all through the winter.† In addition, as procurable, grass in the ear, canary grass, green oats, wheat, garden weeds (non-poisonous), plum tree suckers, rape seedlings, etc., are given in abundance.

INSECTS: I am lavish in the use of the mealworm, they may be given in any quantity without any fear of ill effect (note, I am speaking of the outdoor aviary at present, rich fat-forming foods must be regulated according to the amount of exercise a bird gets), even with birds in cages it may be given freely to advantage. They also get such spiders, earwigs, live ants' cocoons, beetles, aphidæ, etc., as my garden (only an ordinary suburban one) supplies. I repeat here that I have yet to come across the seed-eater that will not take, or is not the better for, some live insects.

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* Sold as both French and Indian, at least I can detect no difference between them.—ED.

† It is greedily eaten throughout the year.

MILK SOP: This I am aware is not orthodox, but I find it a safe and valuable food, if prepared with ordinary care, and the food vessel is thoroughly cleansed daily. (Note, I am not a man of leisure who can trot down to my birds two or three times a day; far from it, they get a supply only in the morning of each day, excepting green food and fruit, which some of my people renew at mid-day, and also give another supply of mealworms, etc.) I am bound to supply it for the Varied Lorikeets. I could not put up with these birds in a cage, as it was almost impossible to keep them clean in the time at my disposal. I find the Tanagers and most of the soft-bills take of it fairly freely. Prepared as under, it will keep fresh for twenty-four hours in the hottest weather. Take two Osborne biscuits, two teaspoonsful of moist sugar, and a teacupful of milk, boil the whole up together, and when cool supply to the birds. I have never yet found this to go sour and it is put in the aviary one morning and not removed till the next.

I had better add here, that as regards birds kept in smaller enclosures (I keep nothing in a smaller space than 2½ ft. by 1½ ft. by 3 ft. high), I add to the insectile mixture already described a greater proportion of sponge cake, ground biscuit, or potato, also limiting the supply of live insects to a given quantity, on the other hand ripe fruit is supplied *ad lib.*

I must further add that all my birds, however kept, get a continuous supply of gritty sand, crushed egg shell, mortar rubbish, and cuttlefish ; and till this season (in the early part of which I was confined to my room) I have not had a case of egg binding among my birds for seven years.

ACCLIMATISATION OF BIRDS.

My methods are, I fear, very rough and ready ; but some care is absolutely necessary with new purchases of freshly imported birds ; to turn such out of doors immediately, even in hot weather, after what they have been through during the voyage to this country, their stay in the dealer's shop and a probably long railway journey, is to invite 70 to 80 % of losses. All birds should be kept in cages for a day at least, to recover from the journey, and so have a supply of food ready to hand. Newly imported birds should be isolated for several weeks, and though they must not be kept in either a dull aspect or vitiated atmosphere, yet they should not be subjected to cool winds or draught ; their cage should be of the box type, and all food vessels placed in such a position, *that they cannot get fouled* ; cages should have a daily clean, and grit and water be given sparingly at first, but after the first couple of days they can have a continuous supply. With the delicate Finches and Waxbills (by delicate, I mean such species as arrive in this country in a tainted and exhausted condition), a supply of green fly and other plant bugs, and living ants' cocoons, will save many that would otherwise be lost. Birds coming to hand in the winter, I consider best kept in a room where a little artificial heat is available during severe weather ; but, I repeat again, not in a vitiated atmosphere, they must have *fresh air* without draught. To sum up, do not coddle, at the same time guard against draught; keep cages and food vessels strictly clean, supply wholesome and nourishing food according to the species; let your quarantine cages* be *roomy* and of the box type, with perches, etc., arranged so as to leave room for exercise. By the above "rough and ready" method I usually succeed in saving the bulk of my purchases, but I must freely confess that Cordon Bleus and Fire Finches I have never kept, not considering it right in the face of the *awful mortality* that occurs under the present conditions of importation.

(*To be continued*).

The Green Singing Finch.

(Serinus icterus).

By AVICULTURIST.

This beautiful Southern and Western African bird greatly resembles our English Siskin in colour, size, and activity; but is more slimly built, and is fully as active and entertaining among the branches as our native Tits. A description would be superfluous—it being well known—therefore will simply say, for the benefit of any unacquainted with this charming Serin, that it is a bright yellow bird, variegated with olive green and lined with black.

They are very attractive and pleasing, both in colour and deportment, readily become tame, *but are quarrelsome in a mixed collection put up for breeding;* with a mixed assortment of Finches kept simply for show and not for breeding, a single specimen may be kept without much risk *providing there is plenty of space.* They are quite hardy, in spite of what some writers have stated "that the least frost would be fatal"; mine have been out doors all the year round for three years, in a small portable aviary, which is but little more than a large box cage, with waterproof gable top; they are never covered up at night, not in the severest weather, and they show by their demeanour in the midst of them, that our winter frosts, wet and fog do not inconvenience them in the least.

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* Spare cages should be on hand, and after a death the cage in question should be scalded out and distempered before using again.

There is no apparent sexual difference, the hen being perhaps a shade smaller and a trifle duller in colour, but this distinction would only hold good, when the birds were of the same age. For instance, an old hen would be as large and as brilliant as a young cock, in spite of this there is but little difficulty in sexing up, as the male sings almost incessantly and the hen but seldom. One writer states that the hen has a white spot on the chin—this I cannot say—my hen has no such mark, but in making this comment I must state that I have had but one pair.

Its nest is usually found in a bush, seldom more than 3 feet from the ground, it is built of grass and lined with softer materials; usually four eggs are laid —yellowish white, more or less spotted with buff. Incubation lasts twelve or thirteen days. The young are covered with whitish down and leave the nest when about three weeks old. The nesting time is from September to January, hence the comparative failure to breed this Serin by the bulk of English aviculturists.

One writer states that they readily breed, and ought to be called *love birds* because of their affection one for the other—with this I cannot agree. I believe that in Great Britain there are not more than a dozen fully recorded instances of the actual rearing of young, though its Grey relative with some aviculturists rears its young freely. Though kept together all the year round (and in separate pairs also), there appears to be neither intercourse or affection (rather the reverse) between the sexes, except during the period of nidification; they also re-pair each season, the hen alone incubates, she comes off for a few minutes only in the morning (the eggs meanwhile being left uncovered) during the remainder of the day the cock feeds her on the nest.

Though always in the pink of condition, they never attempted to build with me till August 1905. I have never seen the cock make play to the hen, as nearly all species of birds do, but rather seems to make himself disagreeable; he hisses vigorously and apparently swears considerably at his wife. Just before they commenced building I really became alarmed, for they went at it "hammer and tongs"; the hen had patches of feathers pulled out and was bleeding in several places on the head, she went crouching anywhere she could to get away from the violence and persecution of her husband; for more than a week this went on, till I began to fear I should have to separate them, though I was quite certain they were a pair; but it was only nature, for all at once it ceased—there was a calm. The hen began to build in a German travelling cage, first covering the bottom with tufts of grass, dried chickweed, &c., as a base, and then at one end reared a substantial cup-shaped nest of fine hay, as circular as if it had been turned in a lathe—

about 5in. outside diameter by 2½in. inside and quite 2½in. deep—the hen being scarcely visible while sitting. She sat closely on four eggs from Sept. 4th to 22nd and then gave up, so I cannot record actual success.

Food: Canary and white millet with flowering grasses, groundsel, grit, &c., with a few ants' cocoons and a little soft food as a change, which with a bath daily will keep them in a perfect state of health. When they have young a branch covered with aphides will be much appreciated and help greatly toward the successful rearing of the young.

It would thus appear that in violence of courtship and separation of sexes (for even if caged together, they simply will have nothing to do one with the other, excepting during the breeding season) they resemble our Chaffinch.

I must also charge them with egg eating, as the aforementioned eggs disappeared, and it was impossible for mice to get into their aviary, though I did not catch them *acto flagranto.*

Hybrids have been produced with the Canary and its Grey coated relative.

They are enduring, the male has a sweet and fairly sustained song; their movements among the branches are active and interesting, and even with more than the disadvantages enumerated above, are worth a place in every bird room, where they will be a source of pleasure and interest to their owner.

Correspondence.

NESTING OF VIRGINIAN CARDINALS.

Sir,—I note Mr. Teschemaker in his interesting "Nesting Notes" in April issue, relates the doings of a pair of Virginian Cardinals. Possibly my experience with a pair may be of interest. My pair are in an aviary 66 feet by 15 feet, and in spite of this I have not had much luck with them, the majority suffer from cramp. About three years ago I suceeded in rearing three, but lost two with changing their seed; at that time this part of the country was over-run with Daddy-long-legs; the old birds used to feed their young on sunflower seed, but this is difficult for the young to crack, so I changed them on to canary, millet and insects.

During the period I have kept them I have gleaned the following facts: if the parents are good feeders, they leave the nest on the 9th or 10th day, they are then well-feathered and able to hop about on the branches. When they are four or five weeks old, the hen mostly commences to nest again, the cock feeding the young for the next fourteen days, when the second brood will be hatched; the young must now be removed to another enclosure, and if you wish the second brood to fare well, they should be out of sight of the old birds. It is at this point when the cock should take up the feeding, that I have lost the young; excepting the case aforementioned he has mostly left them to starve. As soon as the young were hatched I supplied mealworms in abundance (a pint in fourteen days), also beetles, daddy-longlegs, wasps, maggots, etc., with the usual seeds and soft food.

It will probably interest members to know I have had five Cardinal Hybrids, *i.e.* Virginian × Grey Cardinals. The last one died when seven weeks old.

Un Oiseau.

Editorial.

The Bronze-wing × Magpie Mannikin Hybrid: This bird, which I briefly noted in our last issue, is now in almost mature plumage, and from being a plain brown bird, it now might easily be taken for a small specimen of the Magpie Mannikin (also known as the Pied Grassfinch). This change has not been brought about by a moult, for the bird has not shed a feather, but by a growth of colour in the feathers. It was most interesting to watch this change, the under surface growing, at first almost imperceptably lighter, and the upper surface correspondingly darker. The whole of the head and neck are glossy black, and the under surface is white slightly stained with buff; upper surface, dark umber-brown; the barrings on the rump of Bronze-wing are so far not present in the hybrid. and the side barrings are a compromise of those of its parents. It has the Bronze-wing's tail as to form and colour, and there are several points to remind one of the Bronze-wing, though it decidedly, at a first glance, looks like a small Magpie Mannikin.

The Birds at Toddington Manor: Spending a week end at Bedford last month, I took advantage of the opportunity to call and see Mrs. Warren Vernon's birds. My visit (owing to the train service) was but a short one, so am unable to give as full a review as the case merits. Here was another case of birds in cages (these had been made to Mrs. Vernon's own design, and were very complete, roomy, and in every way admirable), being happy and in good condition, this was very evident from their demeanour. In one were four Tanagers, viz., Blue, Scarlet, Superb, and Tricolor, all ♂'s and in finest condition. In other cages were Chinese Dyal Birds and Indian Shamah, though moulting, apparently healthy and in good condition. I noticed in other cages what interested me perhaps more than all, a Wood Warbler and a Stonechat, both young males of the year, almost in mature plumage, very tame and in exquisite condition, not a feather appearing out of place. I also noticed five young Bullfinches, birds of the year and showing the adult plumage. In another large flight cage were six pairs of Zebra Waxbills, two Willow Warblers (interesting little fellows, apparently very fit and happy), Pileated Finch, Black-faced Serin, and another Serin, in too poor plumage to determine the species. All these cages were arranged in a lofty conservatory, and embowered as they were in greenery and floral display, the appearance of the birds was much enhanced; the aviary-cage of Tanagers especially looking very fine amidst such environment.

THE BIRD ROOM: Mrs. Vernon has already described this in our pages, so it simply remains for me to note, that it answers its purpose perfectly well, and its arrangements, though very simple, are yet fully comprehensive; one point is worthy of note, that is, the window covered with wire netting on the inside, had another covering of string netting in front of same, of course with a space between, making it almost impossible for the wildest bird to injure itself. Flying loose were: Taha, Madagascar, and Grenadier Weavers, Pintail Whydah (a very fine and also pugnacious fellow), Cutthroats, Liothrix, Scarlet-cheeked Bulbuls, Red-headed Finch, Brown-throated Cardinal, Cape Sparrows, White Java Sparrows, etc., all in very fine condition.

THE WAXBILLS' AVIARY: This was out of doors, and of course to me was the pick of the lot; its diminutive inhabitants evidently revelling in hygienic surroundings and a Southern situation. Here were two pairs Zebra Waxbills, one pair Green and two pairs Common Avadavats, two pairs Cordon Bleus and one pair each Pintail Nonpariels, Diamond Sparrows, and Green Singing Finches. From their appearance, the unspeakable weather of this year had troubled them but little. The branches at back of aviary, had long straw fastened to them, making splendid shelter for the birds; among these were quite a number of spherical nests, with entrance hole facing the light, constructed of hay, grass, etc., and snugly lined with feathers; one of these contained a brood of Green Avadavats* fully fledged, these I learn later are fending for themselves, and already beginning to show adult plumage. On the ground, among the growing grass, right against front of aviary, was a really cunning nest*, built by the Zebra Waxbills, and, just on

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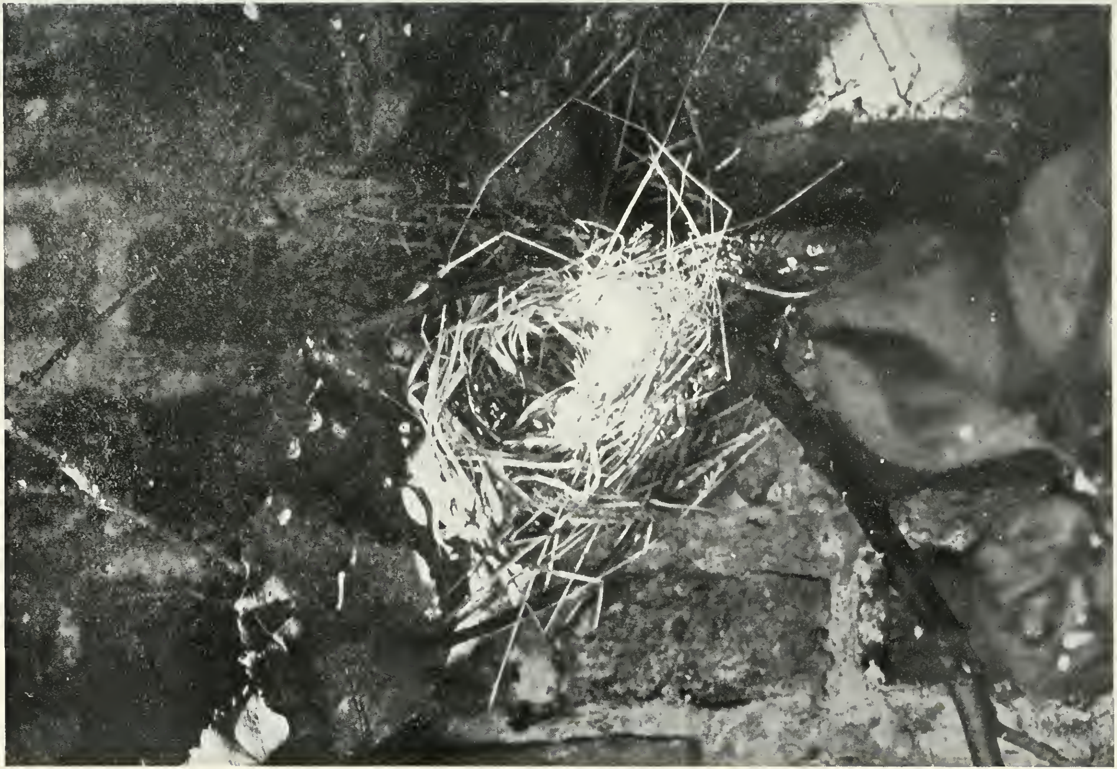
* See plates.

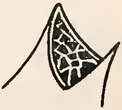
NEST OF ZEBRA WAXBILL,

n the Aviary at Toddington Manor.



going to press, I learn that it contains a brood of four callow young, which are lusty and doing well; also that three young Cordon Bleus are now on the wing and doing well; these results speak well for the arrangement and construction of the aviary, which is not unduly large; yet the birds appeared but little perturbed by the presence of three persons inside, examining their domestic arrangements. In conclusion I must just note a very tame specimen of the Brown Owl, which had been taken in the grounds, I think, this year. It permitted us to handle it and appeared to enjoy having its poll scratched as much as a parrot. I pass by the Nightjar as Mrs. Vernon is describing it in this issue, though she does not do justice to her interesting and unique pet. Mrs. Vernon is very fortunate in having an almost unlimited supply of live insects for the catching, in her extensive grounds.

Cutthroat × Red-head Finch Hybrid: About the middle of 1906 I bought a pair of Red-headed Finches (*Amadina erythrocephala*), they did well but got no further than several clutches of eggs. In July of this year the ♂ died with a tumour over the eye, I soon noticed a batchelor Cutthroat making advances to the widow. I observed nothing further, save that they were seldom to be seen about together; about a fortnight ago I heard young calling for food, but could not fully locate them till this morning (Sept. 28), when I discovered that I have at any rate one, if not two, young hybrids of this cross; the one I saw is fully fledged and larger than its male parent. I was much interested, when lifting the lid of the box to see a gaping mouth, the interior of which was marked with a pattern exactly like wire netting, this pattern was marked in thick lines of pale yellowish white, the spaces between the lines being dull greyish pink. I have endeavoured to figure the bird's mouth from memory in the accompanying diagram, but have not succeeded very well, the pattern in sketch is certainly not so strikingly or clearly defined as I saw it, the pale line appearing almost luminous in the darkish interior of the nest box. Its plumage resembles that of the Cutthroat, but as no red is yet to be seen, it is apparently a ♀,



as the young ♂ Cutthroat has the red throat band when it leaves the nest. In size it is as fully as large as the Red-headed Finch.

Virginian × Grey Cardinal Hybrid: In response to my request for details, I have been able to glean the following facts. The Grey Cardinal was the survivor of a pair which occupied the same enclosure as a pair of Virginians, one of each pair died, and shortly afterwards the Grey was seen carrying hairs about; after observation a nest was discovered in an oval shaped basket, constructed with fine roots and lined with horse hairs; three eggs were laid and incubated for 14 days, all three were duly hatched, but owing to a shortage of live insects the young all died. This year she built in a holly bush and laid three eggs, which were all clear; she then built in the basket again and two young were duly hatched, one died when three days old, the other left the nest when about two weeks old, being then rather weak on its legs; its beak also appeared to be deformed, the upper mandible being shorter than the lower, and it had great difficulty in picking up its food; after the old birds left off feeding, it did not get sufficient nourishment, though it lingered on till it was seven weeks old. Unfortunately it was not preserved; its plumage resembled that of the young Virginians, but was darker on the upper surface and the shape of its head and crest resembled that of the Grey. Unfortunately the experiment cannot be repeated as the Grey was drowned in a watering can, half full of water, inadvertently left in the aviary. The cross was an interesting occurrence, though the young hybrid had but a short life. Several instances have come to my knowledge of young being hatched from Grey × Pope Cardinals but the young did not leave the nest alive; a similar pairing in my own aviary has so far not even resulted in eggs.

Some Notes on American Birds.

Compiled from "Bird Lore," the official organ of the Audubon Societies of America.

THE ROSE-BREASTED GROSBEAK (*Hedymeles ludovicians*). This really fine bird is unsurpassed by few tropical birds in brilliancy of colour, and nearly all writers agree as to its power of song, and that among American birds it must be placed in the front rank of feathered vocalists. The upper surface of the adult male is glossy black, variegated with pure white; the under surface, throat and neck being black; breast, rich rosy carmine, remainder of lower surface, white. The adult female is greenish-brown above, variegated with white; below: throat, abdomen, and ventral region, whitish buff; breast and sides of body, light buff, the breast strongly washed with yellow, both the breast and sides are regularly striated with dark brown. It is a migrant, wintering in the West Indies, Mexico, Central, and Northern South America. It arrives early in May and departs with the fall of the leaf. Its food appears to be largely beetles, etc., and it has a large economic value, being one of the few birds that have a liking for the destructive Colorado potato-beetle. The nest is an open cup-shaped structure; clutch mostly four; colour of eggs, pale green, thickly speckled with brown. These notes cannot be complete without quoting Audubon's graphic account of the song.

> "One year, in the month of August, I was trudging along the shores of "the Mohawk River, when night overtook me. I resolved to camp where "I was. My little fire was soon lighted under a rock, and spreading out "my scanty stock of provisions, I reclined on my grassy couch. The "thoughts of my worldly mission came to my mind, and having thanked "the Creator for his never-failing mercy, I closed my eyes and was pass-"ing away into the world of dreaming existence, when suddenly there "burst on my soul the serenade of the Rose-breasted bird, so rich, so "mellow, so loud in the stillness of the night, that sleep fled from my eye-"lids. Never did I enjoy music more: it thrilled through my heart, and "surrounded me with an atmosphere of bliss. One might easily imagine "that even the Owl, charmed by such delightful music, remained rever-"ently silent. Long after the sounds ceased did I enjoy them, and when "all had again become still, I stretched out my wearied limbs, and gave "myself up to the luxury of repose."

SOME THRUSHES OF NORTH AMERICA: J. Dwight fittingly describes them as:

> "dainty of plumage and musical of voice" and as being "the most "delightful members of the great bird population that spreads North-"ward over the Continent in Spring, to retreat far Southward again in "Autumn, before the snow and ice of a northern winter."

Five specimens common to the North American Continent, or portions of it, viz.: The Wood Thrush (*Hylocichla mustelina*), Wilson's (*H. fuscescens*), Hermit (*H. guttata*), Olive-backed

(*H. ustulata*), Grey-cheeked (*H. aliciæ*). These birds in English nomenclature are all grouped under the genus *Turdus*.

J. Dwight fittingly describes them as a whole as follows:

> "In plumage the Thrushes are different shades of brown, the breast "and underparts white with dusky spotting and often suffused with "buffs and grays. They moult but once in the year, but, as they dwell "mostly in shaded seclusion, they do not fade as much as might be "expected in the course of a twelvemonth."

THE WOOD THRUSH. Several specimens of this are now to be seen at the London Zoo in the Western Aviary. They may be roughly described as follows: Upper surface, tawny-brown; lower surface, white, heavily spotted with black. It is much larger than Wilson's Thrush, a specimen of which is in the same aviary. Its range is Eastern North America.

WILSON'S THRUSH. This is much smaller than the Wood Thrush, less tawny, and the spots of the under surface are neither so large or dark in colour; nevertheless, it is a very beautiful species. The species ranges farther South than the preceding. It is also known as the Veery, so called from its song, which is said to be somewhat monotonous, though consisting of "sweet repetition of metallic whistled notes."

OLIVE-BACKED THRUSHES, also known as Russet-backed, area grouping three species: *ustulata*, *swainsoni*, and *almonæ*. Varying but little one from the other. They are sweet singers and the quiet of evening is the time usually chosen for the pouring forth of their melody.

THE HERMIT THRUSHES are a group of four species, *guttata*, *pallasi*, *auduboni* and *nana*: ranging along the Maine and Californian coasts and over Alleghanies and Southern Rocky Mountains to an altitude of 8000 feet. It is more sluggish both as to movements and utterance of song than the Olive-backs.

> "The Hermit Thrush bears the palm as the most gifted songster of "North America, and his sweet, measured notes poured forth in many "stanzas of different keys have been the theme of poetic writers"

THE GREY-CHEEKED THRUSH (*Haliciæ*). This species is found in the most inhospitable Northern regions of the Continent, even building its nest in the stunted birches, willows, etc., that fringe the Arctic Ocean. In size and plumage it closely resembles the Olive-backed, but the browns of its upper surface have a greenish hue. Its song is said to resemble that of the Hermit Thrush. This species should be specially suitable for outdoor treatment in this country, but are almost impossible to procure, owing to the U. S. prohibiting the importation of their *avifauna.*

The eggs of the Wood, Wilson's, and Hermit Thrushes are plain blue, those of the Olive-backed and Grey-checked being also blue, but spotted with brown.

At the present time specimens of the Wood and Wilson's Thrushes are on view at the London Zoo, which have really called forth these notes, and the descriptions herein are from these living birds.

Anyone having acquaintance with Captains of vessels visiting these ports, or friends living in Canada, California or Mexico, should not fail to make an effort to procure some of these really fine songsters. I have heard of several other species being thus obtained from prohibited regions.

Breeding Certificates: The Awards Committee have awarded certificates for the breeding, for the first time in this country, of the undermentioned species and hybrids:—

Yellow-rumped Serin *(Serinus angolensis).*
Mr. W. E. TESCHEMAKER.
Virginian × Grey Cardinal Hybrid. Mr. J. HUME.
Bronze-wing × Magpie Mannikin Hybrid. Mr. W. T. PAGE.

If any member knows of any previous occurrence of these birds being reared before in this country will they kindly send particulars to the Hon. Editorial Secretary.

Erratum: Re Article on Yellow-winged Sugar Bird, page 163, line 7, read brightest eyes and daintiest legs and feet—line 13, for large read *cage.* Notes on my Aviaries and Parrakeets, page 170, line 7, for absolute read *abortive.* Page 195, line 9 from bottom, for sulphur-crested read *Sulphur-breasted.*

LITERARY NOTE.—The Caxton Publishing Co. announce the issue of "Birds of Great Britain and Ireland (Order Passeres)" by A. G. BUTLER, Ph.D., F.L.S., etc. It will contain coloured figures of every Passerine bird and their eggs included as British, from designs by Messrs. H. Grönvold and F. W. Frohawk. The work will also deal fully with the treatment of the birds in captivity. It will be issued in two Vols, half-calf, gilt top, at 84/- per Vol. From a perusal of the Prospectus it would appear that this work will be fully comprehensive and most sumptuously got up; it should certainly meet with a large demand. Prospectus from The Caxton Publishing Co., Clun House, Surrey Street, Strand, London, W.C.

Post Mortem Reports.

(*Vide Rules*).

Mrs. Miller, 27, Belgrave Road, S.W. Answered by post.

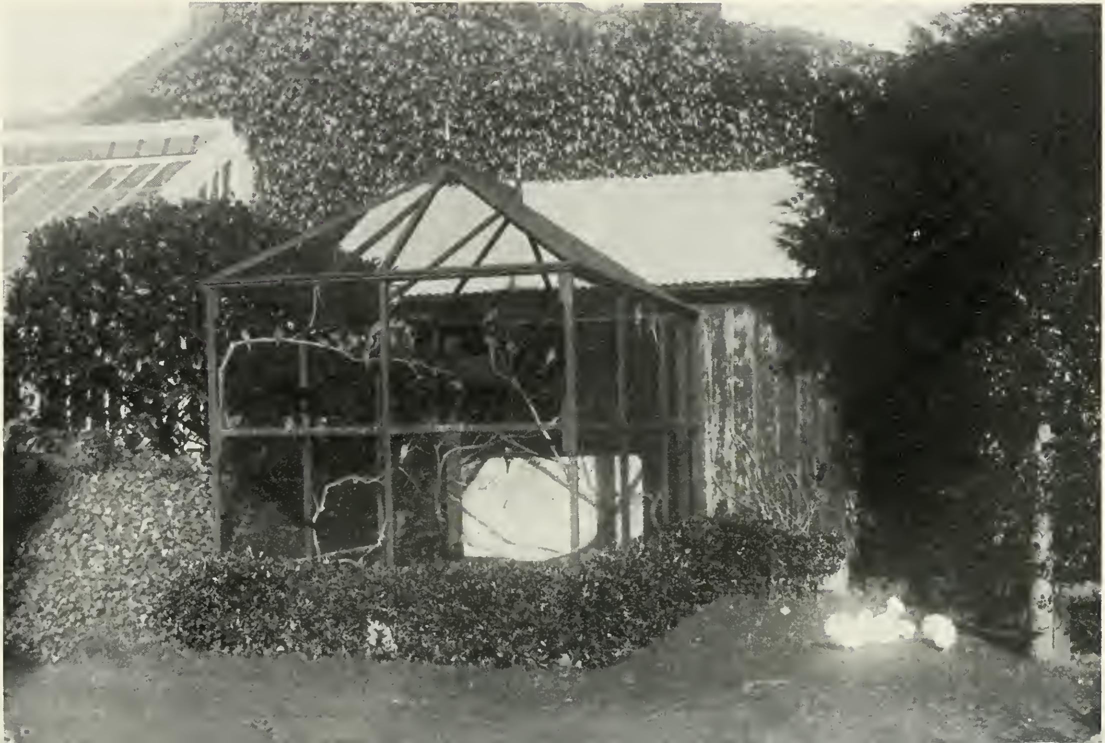
COLOUR-FED HEN CANARY (Frank Howe, Wellingborough). Death was due to acute septic fever. Probably you will lose some more. At present the mortality from this disease is very great. In my own case I have lost one batch of 60 expensive birds which showed the disease in the form of small yellowish foci in the liver and spleen, the latter organ being completely disorganised. In these foci almost pure sultures of a small bacillus were found. It is a very contagious disease and has spread to all classes of birds (British and foreign) insectivorous, frugivorous, and seminivorous. Egg-food has played no part in it. It was introduced by foreign insectivorous birds. The period of incubation is doubtful. Although the disease must have been in existence in the bird's system for some time judging by the post mortem lesions, very few or no symptoms were observed until the day before or on the day of death.

LAVENDER FINCH (Mrs. Mellor, Fairlawn, Lytham, Lancs.) Cause of death, enteritis, due to climatic changes and probably latent infection. See remarks on Avian Cholera in Sept. issue. These birds are very fond of the ordinary insect food, and should have it always by them.

HEN PLUMED MOUNTAIN QUAIL (F. C. Thorpe, Havenside, Hull). Cause of death, infectious enteritis.

HEN PARROT FINCH (M. C. Hawke, Wighill Park, Tadcaster). Cause of death, pneumonia. The bird had not finished its moult, and this, together with incubating eggs acted as a great predisposing factor in the causation of its malady.

HENRY GRAY, M.R.C.V.S.



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BIRD NOTES:

THE JOURNAL OF

THE FOREIGN BIRD CLUB.

Some Parrakeets I have kept.

By T. N. Wilson, M.A.

When I travel, "Ship me somewhere East of Suez"; not for any of the reasons given by Kipling's Tommy Atkins, but because "East is East, and West is West," and, to my Western mind, the East is more interesting than the West on account of its utter difference to my usual surroundings.

For the same reason Parrakeets have always been especially interesting to me; they are so utterly different to our native birds. Budgerigars, Turquoisines, Blue-winged, Grey-headed and Red-faced Lovebirds, Red and Mealy Rosellas, Pennants, Cockatiels, Redrumps, Many-Colours, Yellow Collars, Blue Bonnets and Browns are amongst those which have inhabited my aviaries from time to time. I look back with regret on the days when I gave 25/- a pair for Budgerigars. If that price were still obtainable, Budgerigars would pay far better than Poultry, which indeed I think they can be made to do, even now although selling at a fifth of the price formerly obtainable. At that time Turquoisines were not much more expensive than Budgerigars. I have not seen one for more than fifteen years and a dealer told me recently that if any were imported he could get £20 a pair. What has happened to them? Are they following in the wake of the Dodo or has the march of civilization driven them from their old and accessible haunts?

With Rosellas I have not been fortunate. Although several nests full of young have been hatched, none have attained even the modest age of six months. At the beginning of this year I had two pairs of Red Rosellas in the same aviary. The stronger of the two cocks monopolized both hens and chased the other cock incessantly. I therefore transferred one pair to another aviary in which was a solitary Yellow Collar sold to me as a cock. Soon I noticed the cock Rosella feeding not only his lawful wife but the Yellow Collar as well. The hen Rosella took possession of a nest-box, the Yellow Collar of another and both commenced laying. Alas for that "cock" Yellow Collar! The Rosella laid six eggs and began to sit, but the Yellow Collar broke her eggs through dropping them on the aviary floor. One morning there was disaster. All the Rosellas' eggs were found broken in the nest and I can only conclude that the Yellow Collar was the culprit. The Rosella soon laid again, but died egg-bound with the third egg. The Yellow Collar had at last managed to deposit two eggs in her nest-box on which she sat for a week; she then deserted them and on breaking them I found one fertile and the other clear. The other pair of Rosellas hatched three young, of which one only left the nest, and this bird died three weeks later.

I have described some of my experiences with Pennants in a previous article in *Bird Notes* (see page 251 of the 1905-6 Vol.) In 1905 the same pair reared three more young, which are now in a lady's aviary in the New Forest and doing well.

In April 1899 I purchased a pair of Cockatiels which raised a numerous progeny year after year for several years, when the hen ceased to lay for two years in succession. I therefore obtained another hen towards the end of 1905 and mated her to the old cock. They produced eleven young last year and eight this, so the old cock does not owe me much for his keep. My Cockatiels have been the best of parents and have always reared all the young hatched.

I think that the wet summer we have experienced has been very unfavourable to young birds, and for the first time for the last seven or eight years I have no young Redrumps. The single pair I now possess went to nest as usual and hatched three young, but only one left the nest and this bird—a cock—died shortly after, having been weakly from the first. In previous years I have always reared from three to a dozen Redrumps each year as the progeny of two or three breeding pairs flying together in the same aviary. Redrumps are great favourites of mine. They are said to be quarrelsome, but I have never found them interfere with other Parrakeets, although at the commencement of the breeding season, before the hens settle down to the serious work of incubation, the cocks squabble amongst themselves, but never with any serious results. For quarrelsomeness and real love of fighting Blue Bonnets "take the cake," and I would not now place these birds in the same aviary with any others however large. Peace may reign for a while, but sooner or later some bird will be found dead or mangled, as the result of a sudden access of murderous frenzy on the part of a Blue Bonnet. My first Blue Bonnet—the survivor of a pair bought from a dealer—

lived in a large aviary in company with Rosellas and Pennants, and all went well for a time; but one morning my coachman, who helps me in my aviaries, came to me in haste, saying "Them Rosellas and that there Blue Bonnet are fighting something awful." I rushed down to find the hen Rosella literally scalped and lying exhausted in a corner of the aviary, while the Blue Bonnet was making a great noise on a branch close by, bobbing its silly head up and down and about to complete its murderous work, but I promptly interfered and transferred it elsewhere. Subsequently I bought a pair of these birds, but kept them in an aviary by themselves. Even then the cock tried to fight any bird which alighted on the wire partitions between its aviary and those on either side, and there were many skirmishes and much noise, until my Brown's on the one side and Pennants and Yellow Collars on the other learnt that their toes might be severely hurt if they went within reach of the Blue Bonnets. A new Parrakeet in an adjoining aviary was always greeted with screams of defiance, much bobbing of heads and spreading of tails.

My Brown's Parrakeets have been in my possession since 1903, and have a large aviary to themselves, supplied with nest boxes, but no eggs have been laid and the two birds have shown no signs of pairing. The larger and brighter-coloured of the two, which I believe to be the cock, spends much of his time, in the spring of each year, in one or other of the nest-boxes, and varies the performance by chasing the other about the aviary, but the lady—if lady she be—does not respond to his rather savage advances, and darts away as he darts after her. They are exceedingly handsome birds and seem quite hardy. I give them Canary, white millet, oats and hemp, of which their favourite is canary. They care less for green food than any other Parrakeets I have kept, and the growing grass in the outer part of their enclosure has not disappeared as in my other Parrakeet aviaries.

Brief Notes on Bulbuls.

By E. William Harper, F.Z.S., M.B.O.U.

Our worthy Editor has asked me to write something about the wild life of birds I have met with in the tropics; and I really hardly know where to begin —any more than I should do if requested to write about British birds. However, I have decided to confine my remarks to a favourite Eastern subfamily, namely the *Brachypodinæ*, or Bulbuls. It is a large one, containing upwards of fifty species—not including the so-called "Green Bulbuls" or *Chloropses*, for which Dr. Butler's name of "fruitsucker" is eminently suited.

Bulbuls are confined to the Old World, and the sexes are alike in colour. They have a very short tarsus or "leg," which does not exceed the length of the middle toe and claw together. Most of them are crested, and nearly all have hairs springing from the nape of the neck. They are largely fruit-eaters; and in pursuit of this food will often hover in the air over a bunch of berries. Their song, though not generally sustained, is pleasing, being full of loud liquid notes. One, the Persian White-eared Bulbul (*Molpastes leucotis*) is the famous traditional Eastern "Nightingale." Some of the Bulbuls are very pugnacious: the Bengal

Red-vented Bulbul (*M. bengalensis*) or "Kala" Bulbul —"kala" means black—being often kept for fighting purposes by the natives. The bird is tied by a string, about a yard in length, to a ͳ-shaped perch, upon the horizontal part of which it sits. Cloth is wrapped round the perch to save the bird's feet, the owner of the bird using the end of the verticle portion as a handle. In Calcutta, one may often meet a native in the streets, carrying his favourite Bulbul in this way.

I will just select two species of Bulbuls, with whose nesting habits I am acquainted, namely, the White-cheeked (*M. leucogenys*) and the Bengal Red-whiskered (*Otocompsa emeria*). The White-cheeked Bulbul is found in the Himalayas up to 7,000 feet, and extends into Afghanistan and Kashmir. In the latter country I found it very plentiful; in fact it was not only one of the commonest birds, but also the most confiding. It entered the verandahs and rooms of bungalows, almost taking the place of Sparrows. On the river Jhelum at Srinagar, the capital of Kashmir, it was continually to be seen perched upon the house-boats; which are so largely resorted to by Europeans from the plains of India during the hot weather. I found a nest of this species in a poplar tree about 12 feet from the ground at Baramullah (literally "twelve priests") in Kashmir. It was a loosely-made structure composed of grasses, containing three hard-set eggs, reddish-white, marked with red. The nest and eggs are now in the Museum of the Bombay Natural History Society. The White-cheeked Bulbul is a soberly-clad bird: its upper plumage is earthy brown, abdomen whitish, and lower tail-coverts yellow. Its chief charm lies in its long pointed crest, which projects forward over the nostrils, but quite clear of them. Unfortunately, this charming bird—though so common in its own country—is very seldom imported; which accounts for the fact that it does not appear in the last *List of Animals* at the London Zoo between the years 1883 and 1895, although it has been on exhibition there previously.

The Bengal Red-whiskered Bulbul also has a long pointed crest like the species just considered; but its greatest attraction is a tuft of crimson feathers springing from beneath both eyelids. The upper plumage is earthy brown; head, black; cheeks and abdomen, white; under tail-coverts, crimson. This bird is found in the Himalayas, but also extends over the greater part of the plains of India. I have seen it in Burma and in the Malay Peninsula; and it is found as far East as China. To show how birds get taken to all parts of the world, I saw a pair of Red-whiskered Bulbuls in South America last year, which had just arrived on a cooly-ship from Calcutta. Though confined in a small cage measuring less than a cubic foot, and in spite of the fact that the voyage had lasted about three months, the birds were in perfect condition. Does not this speak volumes for the hardiness of Bulbuls? This pair were quite innocently described as "Nightingales," and the price asked was £5. At Lucknow, a pair of these birds nested in my garden in a small bush about three feet from the ground, within five yards of my bungalow. Three pinkish-white eggs were laid in a rather flimsy nest of twigs, and two young were hatched and reared. My bed was carried outside at night (which is the custom on the plains of India in the hot weather, until the monsoon breaks), and as it was placed quite near the nest, I had ample opportunity of watching the birds feeding their young in the early morning. The latter are without the crimson eye-tufts.

When looking over the aviaries at Toddington Manor a few weeks ago—through the kindness of our member, Mrs. Warren Vernon—I saw a fine pair of these beautiful birds flying in a large bird-room quite harmoniously with a number of smaller birds. All the Bulbuls can be easily kept in confinement upon any good insectivorous food with plenty of ripe fruit. They are also fond of milk. A child I knew in Calcutta who kept several tame Bulbuls used to offer them milk every evening in a tea-spoon, from which they drank with great relish.

Nesting of Serinus angolensis.

THE YELLOW-RUMPED SERIN.

By W. E. TESCHEMAKER, B.A.

The subject of the following notes is one of those charming little songsters of the Serin family with which our South African Colonies are so well endowed. Its range is somewhat extensive, but it appears to be especially plentiful in the Brandfort, Kroonstadt, and Pretoria districts.

Mr. A. H. Evans in a paper contributed to the "Ibis" (Vol. VI. No. 22) mentions having met with it in September, 1905, on kopjes in the Magaliesberg range. Locally it appears to be called the "Black-throated Seedeater"—apparently on the *lucus a non lucendo* principle, for its throat is certainly not black nor even blackish. In size and general appearance it closely resembles the well known Grey Singing Finch but differs from the latter in having some dark brown markings on the throat and a bright yellow rump. Hence it is more aptly and usually called in this country the "Yellow-rumped Serin."

This species seems to be only occasionally imported and then only in small numbers. The first I ever saw in private hands were brought over by a member of the Avicultural Society in the summer of 1905, and I was glad of an opportunity of adding them to my small collection.

With just one exception they reached me in very nice condition and proved to be two males and five females. After spending the autumn indoors they were turned out last January—one pair in a very small covered aviary, kept fairly warm by hot-water pipes, which I recently constructed (and which, I may remark, has proved a total failure as far as breeding is concerned), and the remainder in an open out-door aviary.

As a rule the South African Serins commonly imported into this country seem to accommodate themselves to our seasons and to choose our summer for their nesting operations, but *Serinus angolensis* appears to be an exception, for those I turned out at once paired and began to look for nesting site.

The pair in the covered aviary began to sit on the 6th February in a nest-box hanging on the wall and another pair in the out-door aviary only a day or two later also in a nest box. Here again one may observe some divergence from the ordinary habits of the Serins. I have had nests of the Grey Singing Finch, Green Singing Finch, Grey-necked Serin, and Sulphury Seedeater and one and all have been open nests in shrubs or fruit trees, but the four nests of *Serinus angolensis* I have seen this spring have all been built in nest boxes.

The eggs—usually three in number—seem to vary considerably in colour. One clutch had a bluish ground and was quite devoid of spots; other eggs were bluish with brown spots, and others again cream coloured with faint brown spots. Of course Serins' eggs have usually black spots. Mr. Haagner describes the eggs of *Serinus canicollis* as spotted with brown, but this cannot always be the case as the two clutches laid in my aviary have both had black spots.

The little aviary I have above alluded to was designed to maintain a temperature of 65 degrees and, although it did not quite fulfil my expectations in this respect, still it proved a delightfully warm snuggery to sit and read in on a cold winter's day so that I had every opportunity of watching the birds while nesting. The hen took upon herself almost the entire duty of incubation, the male only taking her place when she came off to feed. During the whole time she was sitting, he used to pour forth a flood of melody and his ringing silvery notes — closely resembling those of the Grey Singing Finch, but more varied and not so shrill—were almost too strenuous in so small a space as twelve feet by six. The song frequently introduces the call note which latter is a dissyllable and may be rendered "*sit-ye.*"

Both birds were most charmingly tame as may be judged from the fact that when one day, during the time they were building, I had to make some alterations to a glazed light in the roof only some two or three feet from their nest box, they continued the construction of their nest with absolute unconcern and several times alighted on my shoulders.

Two young were hatched and most carefully fed by the parents but, alas, they only survived a very few days.

Meantime one of the hens in the adjoining outdoor aviary had been sitting very steadily and also hatched two young. The poor thing had a very bad time of it for, whenever she left the nest, the other two hens—no doubt envious of her success—used to make a combined attack upon her, driving her about unmercifully.

These two jealous spinsters succeeded in entering the nest box one day and killed one of the young, but the remaining one grew apace. Its parents used to spend hours in catching midges for it and I used to supplement this diet by placing mealworms in the nest box which the hen at once passed on to the youngster. This hen also was wonderfully tame. If one wished to examine the young bird she had to be prized off the nest with a stick.

The youngster was lighter in colour than the adults but had more spots. Curiously enough he showed the bright yellow rump in his very first nest plumage. He very soon become independent and I have a note that I heard him singing on April 23rd. The same adult male paired with the other two hens and one of the latter hatched, but she did not rear the young, so that from four nests only one young bird was fully reared, However, of course one does not expect great results from aviculture in February.

Our Zoological Gardens very nearly succeeded in rearing young of this species in the summer of 1906. They had a number of adults in a large wired enclosure out of doors, which nested and hatched successfully but, some very wet weather ensuing, all the young perished.

I hope the Yellow-rumped Serin will be more frequently seen in our aviaries in future as it is a hardy little species, easily acclimatised and a charming songster.

Feeding and Acclimatising Foreign Birds.

By Wesley T. Page, F.Z.S.

(*Continued from page* 214).

Quarantine: At the risk even of wearying my readers I must have another word on this important subject, especially so, as many notices have reached me from various correspondents, who have had simply distressing losses this season, either from an entire neglect of, or too short a stay in quarantine; three weeks should be the minimum period, four or even five would be better. Whatever liberties the outdoor aviarist may take, relying on light, sun and air as his protection against epidemics, the one who keeps his birds in a room indoors cannot afford to take any. Whatever accommodation he may have, or have not, it is always possible to keep new arrivals in some room in which there are no other birds. The chief points necessary to observe are: Warmth (*not dry heat*) without draught; fresh air, strict attention to cleanliness, and wholesome food. Again it is always best to ascertain how birds have been fed, and even if this is not correct, or even worse, distinctly unwholesome, the change to a proper (*i.e.*, wholesome) diet should not be a sudden one, but while suddenness should be avoided the process should not be unduly prolonged. As to the cages for quarantine purposes, I strongly advise the semi-box type, and on no account should a quarantine cage (however healthy its occupant may appear) be introduced into the bird-room proper. A good practice (very troublesome I admit, but also very safe) is to sterilise the cage or cages at once, so as to be ready for the next purchases. Personally, the method adopted is to paint the cage inside and out with neat paraffin, well brushing it into all crevices leaving it thus for a day, then to thoroughly swill every part, front included, with boiling water, and lastly with cold water, leaving it in the open air to dry ; after receiving a coat of washable distemper there should be no danger of infection for another occupant. The above seems very troublesome, but the result is worth it, and it is not so formidable in practice as it appears on paper, possibly some of our members may have a less troublesome, yet equally effective method. I may say, that so far, in my twenty-three years avicultural experience, I have never had an epidemic in bird-room or aviaries.

In dealing with the foods for the various groups of birds, I wish to clearly state that however emphatically I may appear to put down my facts, dogmatism if present, must be taken as more "*apparent than real.*" To dogmatise is certainly far from my intent. So much has been said in the introduction "How I feed my birds" that it will only be necessary to review the foods available for the various groups.

I. SEED-EATERS.

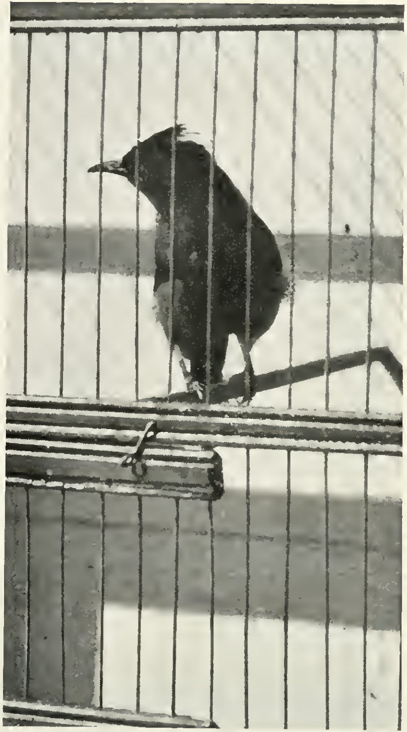
Comprising: Grosbeaks, true Finches, Buntings, Grassfinches, Mannikins, Waxbills, Whydahs, and Weavers.

CANARY SEED must be a standard food in every aviary or bird-room, and rightly or wrongly, I always have more hope of a long life for the birds I see eating it freely. Do not purchase cheap stuff, purchase the best and only from a reliable firm. As to what constitutes good and bad seed I do not purpose entering into, as Mr. Fillmer, in Vol. III. *Bird Notes*, has already done so.

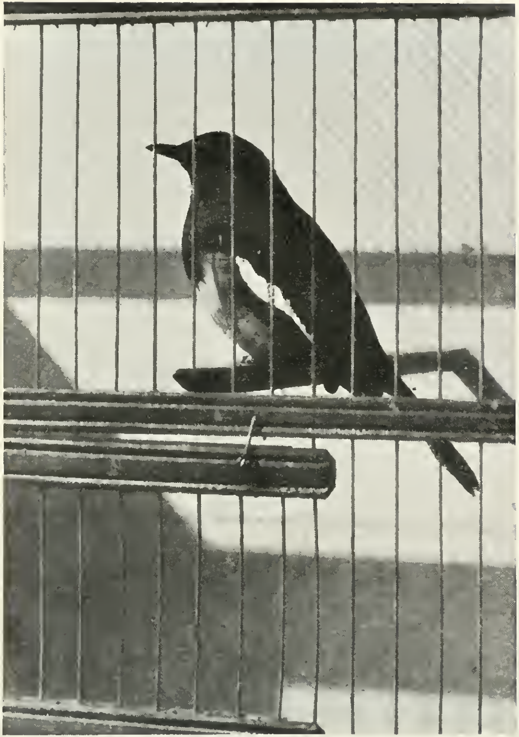
WHITE MILLET,—This I have also used *ad lib.*, and never found any ill effects therefrom, though some aviculturists deprecate its use, and possibly rightly so; nevertheless it occupies a prominent place in my bill of fare, and with an equal bulk of canary seed forms one of my standard mixtures. It is certainly eaten by the birds more readily than the Indian variety.

INDIAN MILLET is a valuable seed, and some of it should always be supplied, along with the white. I may add that the latter is much harder to shell than the former. Indian millet is a *sine qua non* for immature birds, in which state many foreigners reach this country. Nevertheless, I find that with maturity the Indian millet is left alone so long as the supply of white holds out; when supplied in a mixture, equal parts of Indian and white, the leavings next morning invariably consist of the Indian variety. It is also sold as French millet, some only know it by this name.

SPRAY MILLET: This appears to be Indian or French millet in the ear, and I consider this a very



THE BLACK-HEADED SIBIA



THE DAYAL BIRD

valuable form in which to supply it to birds in cages, as it gives exercise to many species in picking out the seed, that are sluggish under the conditions of cage life. In the aviary I seldom use it, as the birds get plenty of exercise without such devices.

BROWN MILLET : I do not care to pass my opinion as to the merits or demerits of this seed, in the days when I bought mixtures, if it had not been for the Quails and Doves it would have been wasted.

PADDY RICE OR RICE IN THE HUSK, is certainly another wholesome food, not so much used as it deserves to be, the South American Grosbeaks and most of the Grassfinches are very fond of it, and I am of the opinion that it is certainly conducive to fine condition with some species.

OATS : The same applies as to the paddy rice, the so-called white oats are more readily eaten than the dark or black oats, and may be supplied either whole or crushed. The above seeds are all of a floury nature and may be supplied *ad lib.* to all cage or aviary birds.

(*To be continued*).

The Black-headed Sibia.

(*Malacias capistrata*).

By MRS. E. WARREN VERNON.

I had no idea what these lovely birds were like when I got a wire from Mr. Hamlyn saying he had a pair for sale.

I believe there are very few in England at this time. They are large, long, slim birds with black heads. The cock can raise his head feathers and bring them forward, till, when excited, it touches the front of his beak. Their colour is a soft prune, with lovely grey and black wings.

They make a noise like a window being shut, squeaky; and another noise like a very noisy chattering. Mr. Page is kindly going to add to these notes, some information *re* wild life and habitat.

They eat seed, soft food and fruit, mealworms from my hand, wasps, flies, and any insects. I hope next spring to get them out and see if they will breed.

I think they will become very tame, but I have only had them a short time.

By W. T. Page, F.Z.S.

Jerdon in his "Birds of India," only describes two species, *capistrata* and *picacoides*, but states that two other species are on record, viz., *gracilis* from Assam, which is rather common on the Khasi hills, and *melanoleuca* from Tenasserim.

Adult male: Its principal colour is deep chestnut-red (Mrs. Vernon terms it soft prune, a description equally correct), paler on the nape or under surface; middle of back, greyish-brown; larger wing feathers, slaty-grey; base of wing-coverts, white, forming a somewhat conspicuous wing bar; tail, ruddy-black, with the basal half black and tipped with grey, the central tail feathers are greyish-rufous; a broad band of black crosses the tail feathers about an inch from the base; beak, black and longish; legs and feet, pale ruddy brown. Total length 9½ inches, tail 5 inches (Description from rough notes made at the Zoo).

Adult female: Similar, but while I have not handled the species, yet from comparison of the birds in the Aviary (Western Aviary, Zoo.) it appeared to me that the black on the head of the female was not so pure as in the male, in fact my notes read tinged brownish; the crest or head feathers of the male when fully raised is distinctly fuller, and also broader when viewed from the front; her plumage below, also appeared to me to be lighter in hue than that of the male.

According to Jerdon this species is found throughout the whole Himalayas, from Simla to Bootan, and is one of the most abundant birds about Darjeeling. It frequents the highest trees, climbing on the larger branches, and clinging round and below the smaller branches almost like a Woodpecker or Nuthatch. The nest has been taken (by Hutton), a construction of coarse grass, moss, wool and rootlets. The eggs are pale bluish-white, speckled with rufous. This is a distinctly handsome bird in a roomy cage, while in the aviary it is a decidedly fine and showy bird. Its contour is slender and graceful, and they are birds of very rapid and noiseless flight. I have never kept this species, but have carefully studied it at the Zoo, where its graceful flittings to and fro, hawking flies and midges were a treat to witness; the smallest midge, invisible to the naked eye, not having a chance to escape. In many cases the only indication of a successful capture was the swallowing of the prey. On one point I must warn my readers, and that is, that from my observations at the Zoo, I should say that it is not safe with small species. When nesting I opine they would wantonly slaughter all the smaller fry they could get at; and even at other times should consider them very unsafe company for birds smaller or weaker than themselves.

Our esteemed member, Mr. E. W. Harper, in 1902 loosed eleven specimens at Wimborne, in Dorsetshire, which he had privately imported. Their fate is unknown, excepting two, one being shot the other drowned.

Of the other species of this fine genus (none of which have, so far as I know, been yet imported to this country), I shall content myself with a short description of *picacoides*, from Jerdon's "Birds of India."

* * *

THE LONG-TAILED SIBIA.

M. picacoides.

Description: "Above, greenish fuscous, slightly darker on "the forehead; lores, black; the wings, dusky, with a large "white wing-spot formed by the middle third of the outer webs "of four of the secondaries; tail dusky, with broad white tip; "beneath dark ashy, paler on the belly. Beak and legs black-"ish; irides, red-brown. Length 14 inches, tail 8¾."

The Dayal Bird.

(*Copsychus saularis*).

By MRS. E. WARREN VERNON.

I have mentioned this bird before I think. As cage bird he cannot be too highly recommended. Very like a Magpie in colouring, being a blue black with white under breast and on wings. Head, back, and upper breast blue black, with a lovely blue sheen. For impudence and cheek he fairly "takes the cake." He sits on my hand holding to the loose skin, and at the same time cursing me all the time, though leaving off pecking me to greedily eat a mealworm.

His song is lovely, like a Thrush's, only not so loud. He loves a big bath and eats soft food, all kinds of insects, such as worms, slugs, flies, beetles, etc. The more noise there is the better he sings. I think China is his native home, but he seems very hardy.

[With Mrs. Vernon's brief, but descriptive notes of this really fine species, I will not have recourse to my own rough notes, but simply quote Jerdon's "Birds of British India." Jerdon gives the vulgar name of Magpie Robin to this species.

It has bred at the London Zoo in 1873, and since I think, but a like success has not yet been achieved by private aviculturists. I can fully endorse Mrs. Vernon's statement that it makes an ideal cage bird.—Ed].

Description: "Head, neck, breast, body above and wings, black,
"glossed blue on all parts except the wings; abdomen, vent, and under
"tail-coverts, white; the four outer tail feathers on each side, white.

"The female is duller black than the male, and somewhat ashy on the
"breast.

"The young birds have the breast dusky with ruddy spots, the upper
"surface olive-brown turning to slaty.

"Bill and legs black; irides, brown. Length 8½ inches; wing 4; tail
"3 3-10ths; extent 11½; bill at front 11-16ths; tarsus 1⅛.

"The Magpie Robin is found throughout all India, from the Hima-
"layas to Cape Comorin and Ceylon; and eastwards to Arakan and
"Tenasserim. . . . It affects chiefly wooded districts, but does not inhabit
"the deep jungles. Towards the South of India it is less familiar than it
"is in the North, for in Central India, Bengal, &c., it is often seen feeding
"close to houses."

"It is generally seen alone or in pairs, usually seeks its prey on the
"ground from a low perch, after hopping a few steps to pick up an insect.
"When it returns to the perch, it generally elevates its tail and often utters
"a pleasing warble. . . . . Towards evening it may often be seen near the
"top of a tolerably large tree, or other elevated perch pouring out its song.
" . . . . Its food consists of insects of various kinds, small grasshoppers,
"worms, etc. . . It breeds generally in thick bushes or hedges; sometimes
"in a hole in a bank or tree, and occasionally in a hole in a wall, or on the
"rafter of a house. The nest is made of roots and grass; and the eggs,
"four in number, are bluish white, or pale bluish, with pale brown spots
"and blotches. . . . The Dayal is often caged, as well for its song as for
"its pugnacious qualities, which, according to Hodgson, are made use of
"to capture others. Fighting these tame birds is a favourite amusement
"of the rich (in Nepal), nor can any race of game-cocks combat with more
"energy and resolution than do these birds."

My Aviaries and their Inmates.

By the Hon. Mary C. Hawke.

I have been asked by the Editor to write an account of my aviaries and birds. The aviary was originally erected for Golden Pheasants, being afterwards adapted as an aviary for foreign birds. The aviary is 15ft. square, with a shed at one end 5ft. wide, and is divided into two enclosures. Commencing with one side first, there is a shed at one end divided into two, and a wire run with glass extending outside the shed and the roof for about 4½ feet, so that the birds can sit outside without being subjected to wind or rain. They apparently enjoy this arrangement, judging by the use they make of it. In winter afternoons I drive them inside the shed and shut the door; they are let out at daylight each morning. In summer I have an arrangement of green rot-proof canvas, which is fastened to the outside of the glass; at night I pull it over and fasten it down to the ground, which is cemented round the aviary and has hooks fixed in it for this purpose. This preserves the birds from getting scared by stray cats, and also keeps young fledgelings dry and warm. This cover draws back and the birds appreciate the shade in summer. The entrance is at the open wire end, where there is a double door.

Enclosure No. 1 contains Many-Coloured Parrakeets, Virginian Cardinals, Liothrix, Blue Breasted Waxbills, Diamond Sparrows, Madagascar and Napoleon Weavers, Paradise Whydah, Combassous, Saffron Finches, Goldfinches, Canaries, and a Red-breasted Marsh bird. The Many-Colours laid in a log nest near the corner where I enter, and brought off four young ones. The Cardinals brought up one young one, a fine cock; they built in the outside flight under a board 12 inches wide with a division down the middle, the section of this arrangement is T shaped and makes good cover for nest boxes; it is fixed to the roof. I used to hang a tin of mealworms and fresh ants' eggs, when I had them, to the side of the Hartz cage they built in, the other birds then did not take them. They laid again but the eggs disappeared. The Diamond Sparrows also hatched out one young bird which only lived ten days. A pair of Avadavats nested, but all the three eggs were clear. The cock has been in my possession seven or eight years.

Enclosure No. 2 contains one pair of Blue Robins, Parrot Finches, Cherry Finches, Alarios, Pintail Nonpareils, Zebras, Diamond Sparrows, Serins, Yorkshire Canaries, Trumpeter Bullfinches and Gouldians. The Blue Robins built in a hollow log and only hatched one the first time, which lived but eight days. The second time she hatched four and brought them all up but one, which she starved in the nest; it died when ten days old, having suffered from fits and cramp. The third time she hatched out three and reared two of them. I hand-reared the third young one, putting it in a Hedge Sparrow's nest for eight days. The fourth and last time she reared two. They ate mealworms *ad. lib.*, fresh ants' eggs and Century Food mixed with fresh egg yolk; blackbeetles were also eaten freely. The Parrot Finches hatched three young ones in No. 1 enclosure, which they deserted in ten days, so I moved them into No. 2 and they brought off four beautiful birds; the nest was built in a cigar box, fixed horizontally, with half of the front cut away. The Alarios built and hatched three young ones but did not rear them. The hen Gouldian died, and later on the Hen Parrot Finch sitting on eggs, also died. The *Post Mortem* Report said pneumonia. The Zebras hatched but the young all died. The Trumpeter Bullfinches hatched four young ones and they were fully fledged and flying, but she then did not feed them after they left the nest, and they died. Other years she has quite reared them. I then sold them. The old pair of Long-Tailed Grassfinches nested, but without result. A pair of Pectoralis also nested in a box bush but I saw no eggs, and the cock has since died.

The floor of the outside aviary is gravelled over; in No. 2 there are five bushy little box trees. In the shelters I use sand. They have an unlimited supply of food, sunflower and crushed hemp, different varieties of millet, canary, and always soft food, and in summer they get milk-sop; chickweed, groundsel, flowering grasses and lettuce are supplied during the summer months only. I find most birds are very fond of sweet oranges. I found with my old original pair of Virginian Cardinals that I could not give them mealworms or they ate their young ones. I kept a young hen, which was reared by this pair last year, and obtained a very large mate for her. The old Cardinals had always lived peacefully in No. 2 aviary, but the old cock was so annoyed at seeing the young one next door that he turned vicious and killed five young Canaries, so I removed him: his mate I am sorry to say died this autumn; they had been in my possession many years. The hen had two or three nests, but sat too close and did not feed the young ones.

I have a pair of lovely Crimson-wing Parrakeets in another small aviary with an Orange Bishop and pair of Red-headed Finches. Last year the Crimson Wings reared four splendid young ones in a barrel on the ground; this year the hen was ill, and though she quite recovered and finally laid and sat, the eggs were clear. The Red-headed Finches also nested but their eggs were clear.

On the whole it has been a rather uneventful, yet not entirely unproductive season. The unsettled and cold weather, during almost the whole year, being undoubtedly responsible for many failures.

Review.

*Observing and Forecasting the Weather or Meteorology without Instruments.**

An interesting, well written, and neatly got-up booklet of 46 pages, with a half-tone frontispiece, figuring "Shower Cumulus" and "Fine Weather Cumulus" from photographs. There are chapters on

CLOUDS.
WIND.
HALOS AND KINDRED PHENOMENA.
THUNDERSTORMS.
WEATHER SAYINGS.
THE MOON AND THE WEATHER.
PHENOLOGICAL OBSERVATIONS.

From the concluding Chapter we make the following abstracts:

> "In concluding these few remarks, the author trusts that this unpre-"tentious *brochure* on Meteorological phenomena to be observed without "instrumental aid may cause a few of the lovers of nature, who at present "confine their observations perhaps to plants and trees, to gaze up into the "heavens and note the ever-changing beauties of the clouds, which will be "found to be an endless kaleidoscope to the careful watcher......The great "philosopher, John Ruskin, said of Meteorology that "It is the science of

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* *Observing and Forecasting the Weather.* By D. W. HORNER, F.R.Met.Soc., etc. Pub.: WITHERBY & Co., 326, High Holborn, London. Sixpence net

"the pure air and the bright heaven, its thoughts are amidst the loveli-
"ness of creation, it leads the mind as well as the eye to the morning mist,
"the noonday glory, and the twilight cloud, to the peaceful peace of the
"mountain heaven, to the cloudy repose of the green valley; now ex-
"piating on the silence of stormless æther, now on the rushing of the
"wings of the wind. It is indeed a knowledge which must be felt to be in
"its very essence full of the soul of the beautiful."

We can recommend this little book to our readers; it is full of interest from cover to cover.

Editorial.

THE INDIAN BLUE CHAT *(Larvivora brunnea): From a private letter received from Capt. Perreau I have culled the following:*—First, however, I had better quote Oates' and Jerdon's descriptions of this lovely species.

The Indian Blue Chat (*L. brunnea*). "Male: Lores, cheeks and ear coverts, black, produced as a band down the sides of the neck; a distinct white supercilium to the nape; the whole upper plumage, wing-coverts, and the exposed parts of the wings and tail, dull blue; point of the chin and a narrow line bordering the black cheeks, white; throat, breast and sides of the body, bright chestnut; under wing coverts, blue; remainder of lower plumage, white. Bill, black; legs and feet, fleshy; iris, very dark brown."—(OATES).

The Blue Wood-chat (*L. cyana*). Male: Above dusky indigo-blue, with a white superciliary streak; lores and ears, black; beneath, bright rufous (the feathers all dusky blue at their base), albescent towards the vent and under tail-coverts; high coverts cross-barred with blue and white. The female, according to Hodgson, is brown above; white beneath; cheeks breast and flanks, rusty. Bill, dusky; legs, pale fleshy; irides, brown. Length 6 inches; extent 10; tail 2; tarsus 1 1-6ths; bill at front ½.' (JERDON).

According to Capt. Perreau's description of their beauty it must be seen to be appreciated, and although yet unknown to English aviculture are already possessed of two vulgar names, as above. Capt. Perreau describes their plumage as follows.—Above dark blue (not dull as in Oates) shining in the sun; bright and rather light chestnut underneath, with a shining white eyebrow; the lower abdomen and under tail coverts are white as per Oates, but do not show much; dainty and rather long thin legs.

They are of dainty build, action and ways; tail continually flirted in true chat fashion, and I really think they are about the most attractive birds I have kept. They certainly are "rippers," but little beasts to meat off, but once meated off keep very fit indeed. One pair to each aviary are quite enough as the following will show. I have five in one aviary and they each have a particular corner, it would be better if there were only three, as there are only three good corners and feathers are apt to fly, for they are little demons to fight with each other unless they have ample space.

It took me about two months to meat one pair off, but they are looking very fit now. They came through with a rush for about a week, evidently on their way to scatter in the plains; but unless one watched very carefully, you would hardly know they were there, for they are very shy, keeping to thick undergrowth and feeding almost entirely on the ground; they are by no means easy to spot till trapped.

In the aviary they some become very confiding (greed of course), but when they want to disappear they beat a Rock Thrush for vanishing; luckily this is not often, as even when full fed (greed then out of the question), they are such inquisitive beasts, they hang round you till you leave the aviary, and then avoiding each other's pet places, they inquire into aviary things in general, apparently without any question of food in their minds. Then they paddle off to their corners and indulge in a doze. I think insect-eaters even in wild life take a doze between meals, if they can get a heavy meal easily, e.g. when a flight of White Ants occur and all do not get safely to ground, or are otherwise accounted for, for a day or two.

They look smaller than the measurements given, which I surmise are taken from skins. The cocks should make good exhibition birds as they soon get wonderfully steady in a cage. The generic name was given by Hodgson, from the number of insect nests and larvæ he found in its stomach. Dr. Adams, from his observations of this species in the forests of Cashmere, states that it has the habits of a Redstart.

Capt. Perreau hopes to bring some of these birds back with him in March next, so that some of our wealthy members at any rate, should have an opportunity of seeing this lovely species disporting itself in their aviaries.

THE RED-BREASTED MARSH BIRD (*Leistes guaniensis*): I have been asked to give a few notes of this species; I have already, in a previous issue, described its handsome plumage, so that there will be no need to cover that ground again. In July last I became the happy possessor of a pair, which for a week I put in an indoor enclosure, but as they did not steady down, I put them into my outdoor aviary to take their chance with the rest; here, if not confiding, they soon lost their scared rushing about, and when you go in to give them mealworms, so long as you stand still they will take them from close to your feet. They appear to be essentially ground birds, and do not, in my aviary at any rate, seem at all comfortable on a branch or perch, though they are to be so seen *occasionally*. Their usual place of resort is the ground, tops of nest boxes, or two sloping shelves, which have been fitted up to give shelter to nesting receptacles; they run and walk and do not hop at all, so far as my observations go. Quite half their diet consists of seeds, they seem to sample all the kinds I supply, viz., Canary, millet, paddy rice, oats, dari, hemp, but I have never seen them take sunflower seeds. They also take a little soft food, also a little milk sop, which is provided for the Varied Lorikeets, fruit, and as many mealworms, etc., as you like to give them. I have formed the opinion that unless a fair amount of *live* insect food be supplied they would soon get out of condition. When I first turned them out we had a spell of quite cold weather, succeeded by the only real bit of summer we have enjoyed this year; recently the weather has been about as variable as it well could be, with fogs, wet, raw east winds, and semi gales all thrown in as a make-up; these do not appear to have inconvenienced them in the least, and they are looking very fit. Of course this being their first winter in this country I am keeping them under close observation, especially in early morning, when things at this time of year are generally at their worst; and on the first sign of needing it they will be removed indoors, where they will get a little more protection than out of doors, but I do not anticipate having to remove them to my greenhouse bird-room, which is my only indoor accommodation. This has its door open the greater part of daylight, even in severe weather. This species was first imported and presented to the Zoo. fully two years ago by our esteemed member, Mr. E.W. Harper, and this Summer he has introduced them to private aviculture.

NESTING OF BULLFINCHES AND PEKIN ROBINS: A friend, privileged to look over the aviaries of a Bedfordshire lady, supplies me with the following notes. She has this season reared Bullfinches, and the young "are perfect."

[In the past, when I kept only British birds, I reared Bullfinches without difficulty, the chief agent in my success appearing to be unlimited greenfood, supplied fresh three times a day. No live food was given. Ed.]

In an aviary containing a thick green edge, a pair of Pekin Robins have hatched out two young, but did not rear them. Hope to give further details in next issue. If left out of doors throughout the winter, there is a strong probability that they would successfully rear young next season.

THE INDIAN ZOSTEROPS: Captain Perreau in a most interesting letter, giving a chatty account of some of his field experiences, writes:

> "Our Zosterops ought to stand the English winter well, as in winter "I've seen them at a good altitude and they don't seem to mind snow a "bit. These live a great deal more on fruit and berries than is credited "to them. They are ripping little birds and soon become tame and con-"fiding."

Our esteemed member, the Hon. M. C. Hawke, has kept these birds out of doors all the year round, and I have heard of others doing so, but cannot call to mind the particulars at the moment. Jerdon in Vol. II. "Birds of India," gives a most interesting account of *Zosterops palpebrosus*, the White-Eyed Tit, from which I extract the following:

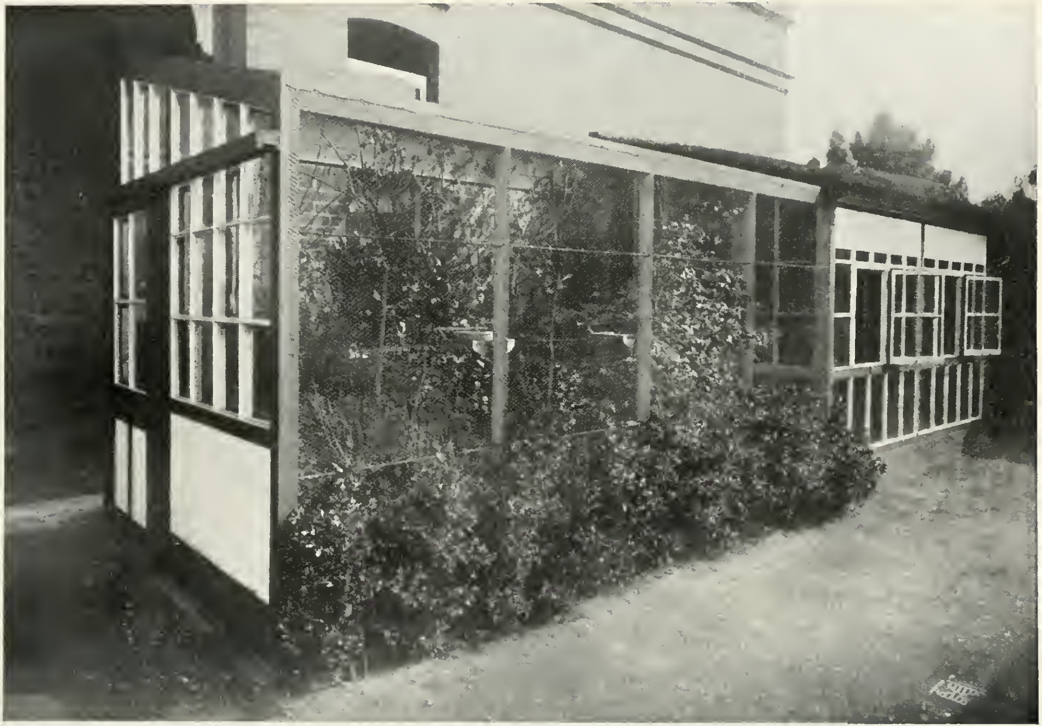
> "The bird is spread throughout the whole of India, from the Hima-"layas to the extreme South, and extends to Assam, Arakan, Tenasserim "and Ceylon. . . . . It is very abundant on the Neilgherries, both in the "woods and gardens; and there it may be seen clinging to the flower "stalks, extracting the minute insects that infest the flowers, by the "pollen of which its forehead is often powdered. . . . . It breeds on the "Neilgherris, and makes an exceedingly deep cup-shaped nest of moss,

"lichen, hair, &c not suspended, in those I have seen, but fixed in the "fork of two smal branches, in a Barberry or other low bush. I found "only two eggs in several nests, of a very pale blue, almost like skimmed "milk. Hutton found at Mussooree that it generally suspended the nest "by some fibres, hair, or silk. He describes the eggs as whitish green . . "that they appear to feed greedily upon the small black berries of a "species of Rhamnus common in these localities."

Description from a skin in my possession:—The upper surface is bright, lightish olive-green, a narrow circle of white feathers surrounds the eye (from which the bird takes one of its English vulgar names, Spectacle Bird); throat and upper breast bright canary-yellow; remainder of under surface, dull bluish-white, tinged with yellowish on the abdomen. Beak, blackish; legs and feet, ruddy horn colour. Total length 4½ inches; tail 1¾. This species is not often on the English market, but the African species of this genus are fairly numerous, some of which are frequently on sale. They make ideal cage and aviary birds, in the aviary especially their Tit-like movements and activity, make them specially attractive. The African species are not so hardy as the Indian species; nevertheless, when once acclimatised are certainly not delicate.

CUTTHROAT × RED-HEADED FINCH HYBRID: I regret to have to record disaster *re* my young hybrid, it got drowned the second day it left the nest. I can only conclude, it got scared during the night, and alighted in the bath (night was very cold) and was unable to get out again. It certainly was the finest youngster I have ever seen leave the nest as to vigour, etc., which only makes the occurrence the more disappointing. I have, however, had it set up true to life, and will figure it with a description in our next issue.

THE YELLOW-RUMPED SERIN: Dr. Sharpe, in B.M.C., Vol. XII., is of the opinion that two species are confounded under the heading *S. angolensis*, and that ultimately they will be separated as *S. angolensis* and *S. atrigularis*. Both the B.M.C. and Stark's "Birds of Africa," describe *S. angolensis* as having the throat and foreneck black. This is not so either in my birds or Mr. Teschemaker's, so that possibly in the near future these will be known as *S. atrigularis*.



Mr. AITCHISON'S FINCH AVIARY,

Correspondence.

MR. AITCHISON'S FINCH AVAIRY (*see plate*).

SIR,—In answer to your query *re* my aviary, I fear that owing to a long illness I have not much to tell. The aviary is 23 feet long and built against the S.W. side of the house. Of the entire length, 10 feet is devoted to a shelter shed, which is divided into two compartments, communicating by a sliding door of wire netting; the shelter is glass on three sides, lined on the inside with wire netting; its roof is thatched with heather. The entire structure is 9 feet high at the back and 7 feet at the eaves. The shelter is well stocked with branches and various kinds of nesting receptacles; the temperature of the shelter, notwithstanding the nights being very cold, has not as yet been lower than 50° F. The flight is of wire netting, except the end which is of glass, with a sliding door for entrance; it is well planted with trees and bushes, and also well provided with nesting receptacles, under a board, which runs along the entire length of roof at its highest point. Outside the flight, as a protection against cats, I have planted a row of short holly bushes which answer the purpose excellently. For reasons already stated its capabilities have not yet been tested, as up to the present a pair of Bullfinches and eleven Gouldian Finches have enjoyed sole occupancy of its space. I have noted that the Bullfinches *always* sleep in the shelter, while the Gouldians *nearly always* sleep in the open. I have also noticed that the cock Gouldians have been in really splendid condition, while the hens have been more or less in poor feather, with a strong disinclination to pair; nevertheless I have now (October 20th) two nests of Gouldians in the shelter, though how many there are in each I cannot say. These particulars are I fear very meagre and uninteresting, the photo however supplies a very good view of the aviary and a general idea of its arrangements, My Tanagers—Superb, Violet, Emerald, and Tricolour are in large cages in my greenhouse. Do you think I could turn the Emeralds into the aviary, and is it probable they would agree with its present inmates? They are fed on banana, orange, Arthur's mixture

with potato and carrot; also spiders and mealworms; is this correct? The Superb appears especially easy to tame and eats out of my hand, quite different to the Violet, Emeralds, and Tricolour.
A. AITCHISON.

The following reply was sent to Mr. Aitchison:

I cannot advise putting the Emeralds into the aviary so late in the year, Had they been out the greater part of the summer I am of the opinion that they could have been safely left out of doors altogether. My Blue (*Tanagra episcopus*), Scarlet (*Rhamphocœlus brasilius*), and Maroon (*R. jacapa*), are out of doors, and the foggy, raw, wet, and variable weather we have been experiencing of late, has not so far (October 31st) apparently inconvenienced them in the least. At the same time I should not care to turn out at this time of the year, even more robust species than the Emeralds. Your diet is fairly satisfactory, my Tanagers get the following soft food mixture: crumbled sponge cake, dried flies, ants' cocoons, dried pupæ, and crushed Osborne biscuits, in equal parts, made just crumbly moist for use, with the addition of ripe fruit and insects. As a change, boiled potato and carrot are added to the soft food mixture. I find most species of Tanagers will eat almost any of our fruits as in season, such as elder berries, soft ripe apple, pear, raspberry, strawberry, red currants, cherries, etc., and I consider the change good for them. Why not make a lobby inside your conservatory, so that they could not escape as you entered, cover the ventilators with wire netting, and let the birds fly loose among your plants. I do not think they would interfere with them, other than clearing them of insects, and among the foliage the effects of their glowing colours would be very fine.
W. T. PAGE.

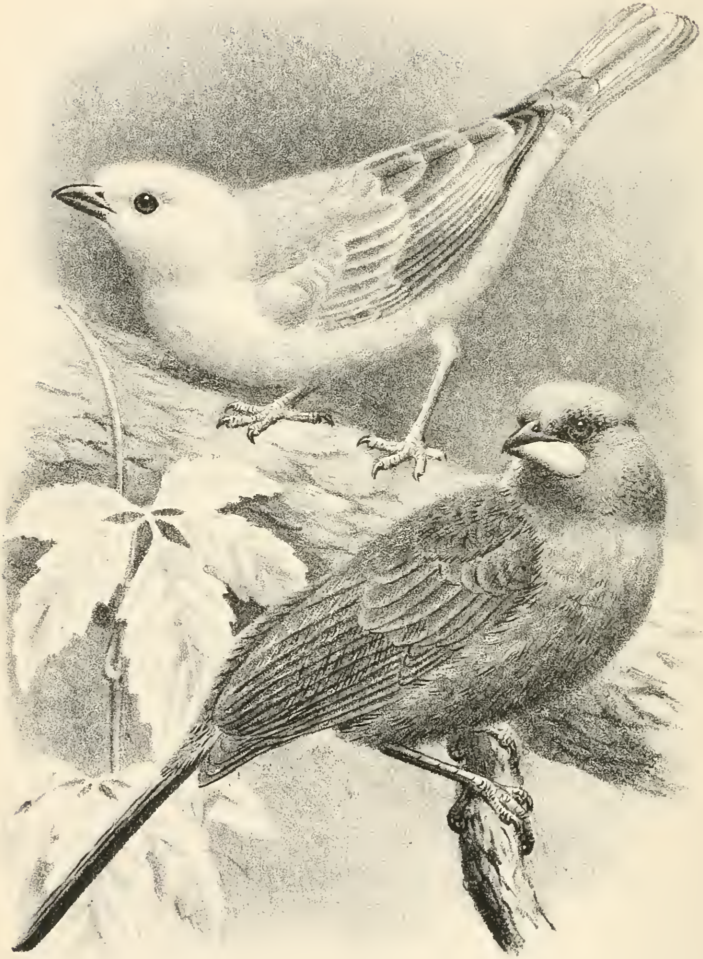
Post Mortem Reports.

(*Vide Rules*).

COCK WOOD WARBLER (Mrs. E. Warren Vernon). This bird had an enlarged liver, but otherwise was in a good condition. The cause of death was the so-called acute septic fever.

COCK PARROT FINCH (The Hon. M. C. Hawke). Case of death acute septic fever with acute pneumonia.

HEN ZEBRA WAXBILL (Mrs. Miller) Cause of death pneumonia.



H. Goodchild del. et lith.

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BLUE TANAGER.

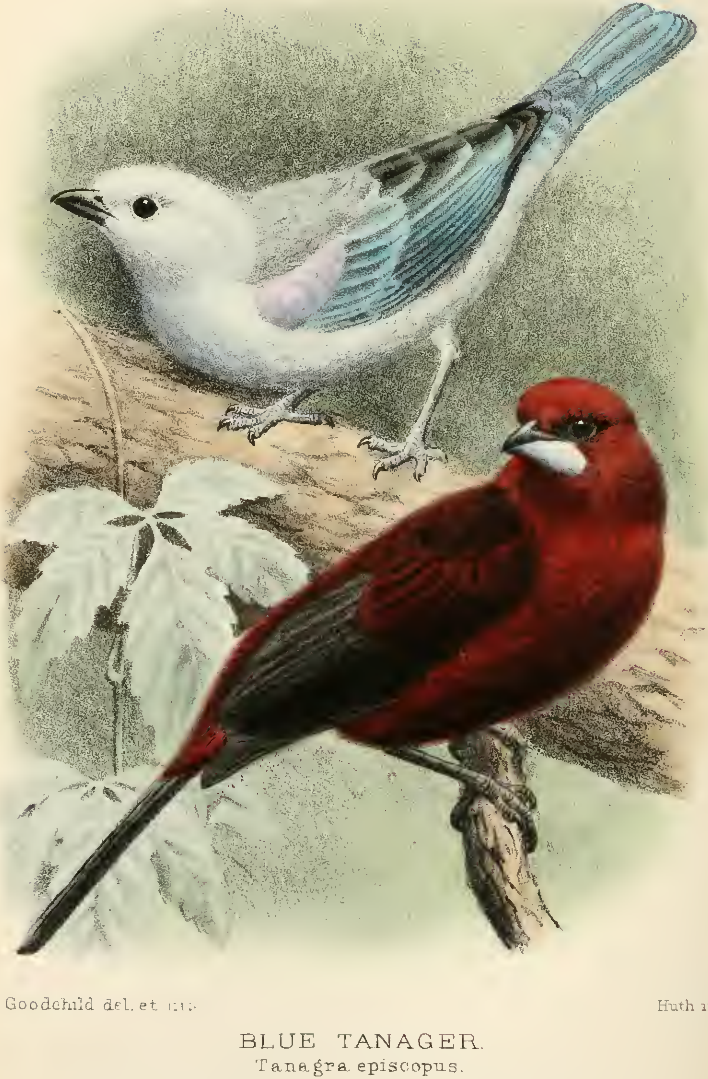
Tanagra episcopus.

From a living specimen in the possession of Mr W. T. Page

MAROON TANAGER.

Ramphocœlus jacapa.

From life.



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BLUE TANAGER.

Tanagra episcopus.

From a living specimen in the possession of Mr W. T. Page

MAROON TANAGER.

Ramphocœlus jacapa.

From life

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BIRD NOTES:

THE JOURNAL OF

THE FOREIGN BIRD CLUB.

Two Tanagers:

THE BLUE (*Tanagra episcopus*), and the MAROON (*Ramphocœlus jacapa*).

By E. W. HARPER, F.Z.S., M.B.O.U.

Our worthy Editor has requested me to write a short account of these two species—which have recently become known to British aviculturists—to accompany a coloured plate. Although I have not yet had the pleasure of seeing the plate, I feel quite sure that, in the hands of an artist of Mr. Goodchild's ability, full justice will be done to the beauty of the birds.

Perhaps a few words upon the family *Tanagridæ*, or Tanagers, may not be out of place. Sclater calls them "dentirostril finches"; and in classification they are generally placed between the Sugar-birds and the Finches. They are arboreal in habits: their mode of leg-progression being by hopping, not walking. Tanagers are confined to the New World, apparently taking the place of the Bulbuls of the Old World. All are largely frugivorous, and more or less insectivorous; though some can crack seed like a Finch. Except the genus *Euphonia*—to which the Violet Tanager belongs—they have little to recommend them as songsters: but what they lack in vocal power is atoned for by beauty of colour.

The Blue Tanager, or "Blue Sackie" as it is called by the natives, is one of the commonest birds in British Guiana, where it may be both seen and heard flying from tree to tree. It appears to be particularly partial to palm-trees, where it doubtless finds abundant insect life; but it is not easily discovered when at rest amongst the leaves, on account of the harmonising colour of its plumage. For a description of the bird, I shall refer my readers to Mr. Goodchild's plate; merely remarking that it is of a beautiful pale blue-grey color, darker on the flights, the wing-butts glistening with silvery blue. Its length is about seven inches. Both sexes are practically alike in colour, but the male may be distinguished from his mate by his more "snakey" shape. When the Blue Tanager is about to fly from its resting-place, it bends forward and downward, reminding one of a runner about to start in a race.

A few weeks ago, I had the pleasure of looking over the aviaries of my esteemed friend, the Editor, and, needless to add, all the birds—except a few which were moulting—were in splendid condition. A pair of Blue Tanagers, shining like satin, were amongst the most striking examples of his skill in aviculture. One of the first birds I kept when residing in Demerara, was a Blue Tanager. It was amongst a mixed lot of about a dozen other colonial birds in a large cage, which I won in a raffle for the modest sum of 48 cents! It may interest our lady readers to learn that the owner of the birds was a young lady about to be be married. Whether this transaction was an effort to "raise the wind," or because her *fiancé* was not a birdy man, I never ascertained. The Blue Tanager builds an open nest and lays spotted eggs. There are other species of "Blue" Tanagers beside *T. episcopus;* but it is unnecessary here to differentiate them.

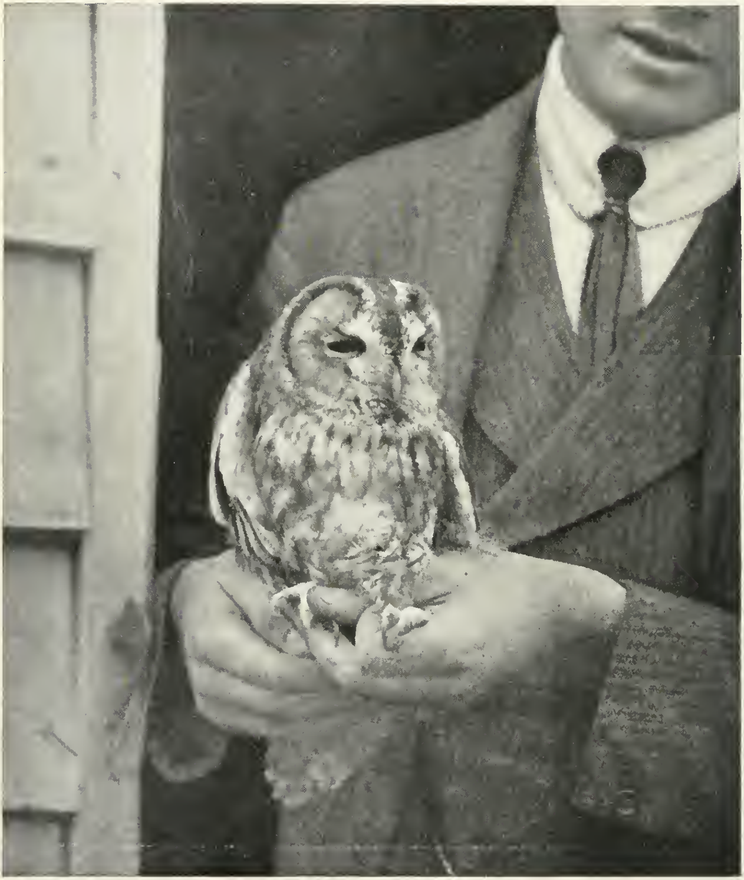
The MAROON TANAGER—such a delightful colour contrast to the Blue—is the "Cashew Sackie" of the natives. It is probable that the bird takes its local name from the male's resemblance to the crimson colour of the cashew fruit, rather than to its fondness for eating it. The Maroon Tanager is about the size of the Scarlet Tanager; but unlike the Blue the sexes in the former differ considerably in colour. The male is dark velvety crimson above and wine-red below. His most striking colour is his bright silvery lower mandible. The female is dull rusty red, and her lower mandible lacks the bright colour of the male's. This species is a common bird in gardens and cultivations in British Guiana; and in the beautiful Botanical Gardens at Georgetown it is always in evidence. Its cry is 'fink, fink,' resembling that of our Chaffinch. The Maroon Tanager is a more insectivorous feeder than the Blue, and is therefore less frequently kept in confinement than the latter by the blacks, who are not aviculturists—a direct contrast to the aborigines, who are very clever with insectivorous birds. Like the other subject of this paper, the Maroon Tanager builds an open nest and lays spotted eggs.

Tanagers and other fruit-eating birds are caught in British Guiana in two ways, namely, by means of a trap-cage or with bird-lime. The trap-cage contains three compartments, the call-bird being placed in the middle one. The two other divisions have weighted doors at the top, which are released and fall when the bird enters. Sometimes no call-bird is used, the trap-cage being simply baited with fruit. The local birdlime is merely the sticky sap of a tree and is used as follows. A papaw fruit—a sweet, oval-shaped fruit about the size of a cocoanut—into which three or four "limed" twigs or umbrella wires have been stuck, is fixed on the end of a stick and placed in a tree. The bird coming to eat the fruit settles upon one of the "limed" twigs or wires, which falls to the ground carrying the captive with it.

In Demerara, I fed my Tanagers—of which I had nine local species—upon sweetened boiled rice and milk, ringing the changes upon boiled potato, yam, and cassara. This had to be renewed twice daily, because it goes sour in a few hours in the tropics. A daily supply of fresh-water shrimps, first beheaded and then cut into small pieces, was also given; together with an unlimited supply of ripe fruit—orange, banana, papaw, cashew, guava, mangoe, pineapple, nectarine, etc. Green food, especially lettuce, is greedily eaten, by both the Blue and the Maroon Tanager. They are also fond of bathing. Upon sugar estates great damage is done to the sugar-canes by caterpillars, for the destruction of which boys are employed. It was thus often possible for a few cents to secure a supply of these fat juicy grubs—which grow nearly two inches long—as a special treat for the birds.

In England, a very good staple food for Tanagers may be made from crumbled stale sponge-cake, mixed with ants' cocoons and dried flies; this must be supplemented by mealworms, green food, and plenty of ripe fruit.

I have found both the Blue and the Maroon Tanager to be amicable with smaller birds in an aviary;



THE BROWN OWL.
(*Syrnium aluco*).

but male Blues are inclined to be quarrelsome with each other.

In conclusion, I may say for the benefit of any of our members who may be contemplating a trip to tropical South America that, in addition to the enterprising and successful efforts of Captain Pam, there are still many species of beautiful Tanagers awaiting an introduction to British aviculture.

The Brown Owl.

(*Syrnium aluco*).

By Mrs. E. Warren Vernon.

I feel I ought to apologise to the members for so often appearing in print, but really they must blame our Editor, as he has asked me for the last three articles that have appeared under my name.

I will, however, cease after this for a spell, and sincerely hope others will help us a little by writing their experiences. No magazine can succeed if the members will not help, and it is wonderful how easy it becomes to jot down one's experiences after a few trials. Now, kind members, do write.

The Owl—whose picture appears with this biography—we call "Bobbie." He came into my possession in a curious way. A Highland sheep dog was in the wood and suddenly appeared with a small brown ball of fluff, unhurt, in his mouth, which, with a deal of slobbering, he laid at our feet. I had no particular desire to possess an Owl, but could not leave the poor little chap to die. There was no apparent nest to be seen, and where he came from remains to this day a mystery.

I did not know what to do to feed him, but put him in a large wooden cage, covered him up with a cloth and covered the bottom with sawdust. Towards dusk I offered him some pieces of raw meat, and he took them greedily after I had put a few down his throat. He grew rapidly and soon sat on a perch.

I always let him out for a fly towards evening, and he used to sit on my hand and be cuddled and stroked, in a very pretty way. In the mornings, while his cage was being cleaned, he sat on the window sill, and the noise outside was extraordinary. Apparently every bird in the garden got wind of their common enemy being near, and though the window had wire netting to it, Blackbirds, Thrushes, Chaffinches, Tits, Sparrows, and even Rooks would come flying at him. Needless to say it was too light for him to see them, and he only blinked.

I often took him out for quite long walks on my arm, and he would sit quite still, as a rule, though, if anything startled him, he would fly off and flop into the grass. I have never had a better-tempered pet, he never bites, and now he is full grown and in lovely plumage, he lives in a house by himself where, I regret to say, he makes night hideous by his screeches, always answered by his many brothers and sisters.

I am hoping to be able to show him at either Westminster or the Palace, but how he will behave in a cage now is a matter for consideration, as he has been free for over six months. He has not the least smell. Certainly his house is washed with Jeyes and kept well sanded, and we feed him on clean food—mice, dead birds, liver, etc. He drinks very little water, and if you speak to him in passing his house, he always answers by snapping his beak.

It is also known as the Tawny and Wood-Owl, also as the Hooter.

Some Birdy Rambles in Europe.

(*Continued from page* 102).

By S. H. Snell, M.D.

From Rome we sped away to Florence, and were quite struck with the number of birds singing in the Cascine. Now the Cascine is the Hyde Park of Florence, and is a narrow strip extending for fully two miles along the north bank of the river Arno, and is practically all trees, a very large proportion of these being elms and evergreen oaks. Blackbirds were particularly busy, but we saw no Thrushes. Chaffinches, of course, and now and then a Nightingale in full song was heard. A few Nuthatches and Creepers were busy on the elm trees.

From the Piazza Michelangelo, an elevated terrace and public ground on the river bank, opposite to and overlooking the main part of Florence (of which it commands a very fine view, showing up well the peculiar brown tile roofing of the city) we watched House Martins and Swallows in their aerial gambols after food. There were no Swifts here, although in Rome they were very plentiful (of the large brown Alpine species).

One fine morning in April, we made an expedition to Fiesole, a village mounted on a vine covered hill a thousand feet above Florence. Penetrating into the country beyond, and still at much the same level, at first no birds at all were to be seen, then suddenly, in a kind of cup in the hillside, we came on Chaffinches, Stonechats, and ox-eye Tits; and presently across the vine clad hills came the familiar sound of "Cuckoo—Cuckoo." The Stonechats were very fine specimens and beautifully marked, but there was not a sign of any of their cousins the Whinchats.

Take it all in all, however, the birds round Florence were not numerous. After a short stay here, a move was made to the seaside city of the canal and gondola—Venice. Now we can summarise the birds we came across in the city of Venice very quickly. We saw *one* Blackbird in the public park, which is situated at one corner of the city, on a kind of peninsular jutting out to sea—two Sparrows and three Starlings! A noble list—but let us hurry to the Piazza of St. Mark and buy a packet of maize. In a moment you can be covered with the famous pigeons of St. Mark, perching on your hand, arms and shoulders and head, or wherever else they can get a foothold. Here are many thousands of the birds, and on a fine morning, about eleven o'clock, it is quite a sight to see dozens and dozens of English, German, American, and other tourists, armed with cameras and bags of Indian corn, each surrounded by a trembling, fluttering crowd of pigeons. The birds are of course like our own pigeons which live a semi-domesticated existence at S. Paul's and other public places in London. They are joined from time to time by escaped varieties of fancy birds, but, as readers know, the indiscriminate breeding throws them back in a few generations to the original parents of all our fancy breeds, the *Columba livia* or rock pigeon.

Away to the east, fronting the green Adriatic, and acting like a breakwater to Venice, is the long flat island of the Lido. Here a few birds were seen; notably a small bunch of Wheatears—all cocks and in most perfect plumage—a single Sedge Warbler was seen among some reeds. The almost complete absence of Gulls from the foreshores was very striking; and indeed all along this coast we saw only one Gull, and that too far away to distinguish the species. One fine afternoon we took one of the quaint gondolas to Muracco, an island about a mile from Venice, and, as everyone knows, the headquarters of the glass industry. We passed on our way a small flock of Brown-headed Gulls. Some representatives of this species may be seen in the Gulls' aviary in the Zoological Gardens here in London.

From Venice we took train away up to the Tyrol, and noted curiously enough that the vegetation which in Italy was backward (more so than in England) was more advanced the further North we went. I have only one birdy note on the journey up, and that is as we were steaming up the valley to the Brenner Pass, a most beautiful Waxwing flew out and alongside the train for some distance, enabling one to have an excellent view of its plumage.

We reached Innsbrück to find that, although hot and sunny, a great fall of snow had taken place two days before, covering the streets to the depth of 2—3 feet, a most unusual thing at this time of year (2nd May). But the mountains covered with snow, which surround Innsbrück on every side, looked very grand, though our walks were very largely spoiled in consequence of the heavy snowfall. We rested longer in Innsbrück, and had ample time for bird-gazing, but of this I must defer the account till a subsequent date.

(*To be continued*).

Nesting of the Rufous-tail Grassfinch.

By J. H. Henstock.

In response to the Editor's request for "more copy" (ever the Editor's cry) "of the common or garden variety," I venture to write a short account of the successful nesting and rearing of the Rufous-tail Grassfinch. I purchased a supposed pair of these beautiful birds from a well-known aviculturist in the Spring of last year, and turned them out into my aviary (which is about 11 feet square) in which was a fairly large collection of other small Foreigners, Canaries, and British Birds. For some little time they made no effort to pair, but it was very evident they were in good breeding condition. This was indicated by a somewhat grotesque dance both would perform together on a branch or perch. Taking a long bent of hay, sometimes quite a foot long, they would manœuvre with it like a balancing pole and then get the end in the beak and commence jumping up and down on the perch for a considerable time. This would go on by both birds intermittently all the day, until, one would think, they were weary of it. I noticed also that both had the almost inaudible guttural "song," if indeed the sound produced may be dignified by such a word. A friend of mine who had seen the birds asked me to get him a pair, and his also made no attempt to breed. Coming to see me one day he noticed both the dance and song, and said his did not sing. On a closer examination he also expressed the opinion that his birds were much paler in colour than mine, and finally we suggested that probably mine were cocks and his were hens. To settle this, I caught one of mine, and here I may say that this was a shade or two paler in colour than the other one. My friend brought me one of his birds and as soon as I turned it into the aviary all doubts were set at rest, for the new arrival was undoubtedly a hen. Merrily as the song and dance had gone on before, it was renewed now in earnest, and nesting operations were forthwith commenced. This took place at the back of the aviary in which I have a hedge of pea-sticks, the interstices being filled up with hay. The birds worked, or shall I say tunnelled, their way into the centre of the hay, and generally took a slightly oblique direction, in order I suppose, to get the nest out of sight. Although there seemed to be a good deal of "carrying" to the nest the construction appeared when finished merely a hole hollowed out of the hay. Just this, neither more nor less. It had no lining of any kind, and as it was made in the hay it looked nothing more than suggested above ; in fact if I had thrust my hand into the hay I could have made a similar receptacle with my fist. I am not aware of the nesting habits of this species in its wild state, but I may say that in my aviary there were numerous nest boxes made of Hartz Canary cages, partially covered with bark, open wood nest boxes, cocoa-nut husks, &c., but on the several occasions my Rufous-tails built, no other place than the hay was used. In two or three days the nest seemed to be complete, and I noticed that the hen was decidedly "lumpy," in fact, I thought she was egg-bound, and there is no doubt this was the case. The next morning, however, she appeared to be all right, and a peep into the nest revealed a small pure white egg, which was the cause of the temporary trouble. I may say here that these symptoms frequently appeared just before the hen laid, and it may be that this species is subject to egg-binding. I say this because all my other birds were entirely free from this very vexatious trouble. She laid five eggs and the work of incubation commenced at once. I noticed that the household duties were equally divided between the birds, the cock always sitting during the day, and the hen taking the night duty. During the whole of the period this was rigidly observed. Whenever I went to the aviary in the day, the cock was on the nest, and about six or seven in the evening the hen always went on. More than once I have seen the exchange made, which reminded me somewhat of the "changing guard."

The first two attempts were abortive, the eggs being clear on both occasions, and I began to despair of bringing off a brood. It was now near the end of July, and the birds again went to nest, and again in a fresh place. They never used the same nest twice, but always sought pastures new. I took but little notice of the event, but about the middle of August, as they were still sitting, I looked into the nest and discovered three young ones. I was naturally rather excited and proceeded at once to examine them. They were perfectly naked and blind, and the skin was of a *light* orange yellow. The beaks, which appeared "gapey," were black lined with white on the outer portion of the mandible, and a white ring also encircled the black spot where the eyes were. They seemed very helpless, much more so than young Canaries of the same age, and appeared to make no effort to raise their heads, when opening their beaks to be fed. I was very doubtful of rearing them, and consoled myself somewhat, I remember, by the fact at I had bred them. Breeding and rearing however e two different things. Still to my surprise and light they appeared to thrive and in a few days eir eyes opened and shortly afterwards the quills peared. When nearly a fortnight old I had to go my short holiday, and I felt very confident that on y return I should find them nearly fledged. But, as, it was not to be, for when they were nearly three eks old, and, I was told, fully fledged, they died, thout any apparent cause. As I was away from me I cannot of course say from what cause, as the anagement of the aviary had gone on pretty much usual.

The feeding consisted of the ordinary seeds, nary, white and brown millet, and they also had cess to hemp, linseed, rape, and egg food, but they most entirely confined themselves to the canary and llet, occasionally picking over the soft food. Spray llet they would also eat, and they spent a good deal time every day over a large bundle of wild seeds, ass in flower, dock, plantain, shepherd's purse, etc., ich I placed in the aviary every morning.

With a partial success last year I was hopeful of tter things this season, and I am pleased to say my orts, or let me be generous and say their efforts, have t with more success. With the very first spell of od weather, the birds went to nest and laid five eggs. is was about Easter when we had a few days' hot ather—about the only bit of summer we had this r. The attempt was futile, the eggs again being ar, and as the weather was very bad they did not pear in a hurry to nest again. This inaction did not t long, for on June 30th I discovered not only a nest, before the hen laid, and it may be that this species subject to egg-binding. I say this because all n other birds were entirely free from this very vexatio trouble. She laid five eggs and the work of incubatic commenced at once. I noticed that the househo duties were equally divided between the birds, tl cock always sitting during the day, and the hen takii the night duty. During the whole of the period th was rigidly observed. Whenever I went to the avia in the day, the cock was on the nest, and about six seven in the evening the hen always went on. Mo than once I have seen the exchange made, which r minded me somewhat of the "changing guard."

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The feeding consisted of the ordinary seeds, canary, white and brown millet, and they also had access to hemp, linseed, rape, and egg food, but they almost entirely confined themselves to the canary and millet, occasionally picking over the soft food. Spray millet they would also eat, and they spent a good deal of time every day over a large bundle of wild seeds, grass in flower, dock, plantain, shepherd's purse, etc., which I placed in the aviary every morning.

With a partial success last year I was hopeful of better things this season, and I am pleased to say my efforts, or let me be generous and say their efforts, have met with more success. With the very first spell of good weather, the birds went to nest and laid five eggs. This was about Easter when we had a few days' hot weather—about the only bit of summer we had this year. The attempt was futile, the eggs again being clear, and as the weather was very bad they did not appear in a hurry to nest again. This inaction did not last long, for on June 30th I discovered not only a nest, but five eggs in it. I noted the date and once more prepared to watch events.* On July 15th three young birds hatched out, and again I watched with feverish anxiety. The nestlings appeared to thrive admirably, and I was full of hope this time. My feelings can be better imagined than described when on about the fifth morning I found one of the youngsters dead. I removed it, and at the same time noticed the others were, or appeared to be, all right. But this time my lucky star must have been in the ascendant, for with remarkable rapidity the birds feathered and actually left the nest on August 2nd. They were strong on the wing from the moment they came out, and appeared to take a delight in their flying exercises. For some time after leaving the nests they were fed by their parents, and I noticed their manner of calling to be fed was almost exactly like the peculiar way of young Zebra Finches. That is, they lay the *back* of the head almost on the floor with the beak upturned and give themselves the appearance of almost standing on their heads. I have only observed this peculiarity in Zebra Finches, but it may also be common with other species.

In conclusion, a word as to colour. They were of a uniform biscuit fawn, with light shade underneath. The beak was red and the feet deep pink. There was no indication of the spots or the scarlet cheeks of the adult birds. Even now (Nov. 28) the spots are struggling through to the surface—it has just that appearance—but there is not the slightest indication at present of the brilliant scarlet cheeks.* One is slightly larger than the other, and I am hoping that they will turn out to be a pair. I regret to say that a few days ago I lost the mother of the birds. She must have flown on to the wires—they are very guilty of that—and a cat seized her. Anyway I found the head pulled off and missing, and the body lying inside the avairy. If I could have caught that cat just then—well it is most likely the tragedy would have been a double one.

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* I cannot say when the first egg was laid, but I believe the clutch had only been completed on the day I found the nest.

Reminiscences of Bird Collecting and a Shopping Visit to Calcutta Dealers.

By Captain G. A. PERREAU.

Having ages ago promised our long-suffering Mr. Editor to send him some copy on the inhabitants of my aviaries or some field notes, I now proceed to discourse at some length on quite another subject, though it really has some connection with the former, as, but for that visit I should probably be even now short of inhabitants to write about. I must warn readers not to expect anything exciting as the sorts I was after, are so easily procurable at home, that my labours must seem ridiculous to many ; however they may find something of interest, probably in side incidents which were of no interest to me at the time, so absorbed was I in the engrossing business of trying to fill my aviaries.

A short résume of my collecting experiences since restarting an aviary in January, 1901, will not be very interesting, but may serve to excuse my apparent lunacy; it would certainly be considered madness up here if it were known. This small aviary was started with a nondescript lot in which odd birds figured much too largely, being survivors spared by a cat from the little lot I had brought out from home or picked up in Bombay, Cawnpore, or Lahore, on the way. Regarding Bombay my wife has a yarn against me. A friend said to her at tiffin, "What a pity your husband was out this morning. A man brought round such a lovely lot of birds, I am sure he would have bought some." I maintained a guilty silence, as those birds were the result of my "morning out" in the Crawford Market. I had to own up after tiffin and take the usual chaff. There was only one cage, too, though I must own it was rather crowded.

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* Unfortunately one of the young has died, and on December 6th I received its body. The white spots were then well developed, and there were specks of scarlet showing round the base of the upper mandible.—ED.

I quickly realised that enforced absences barred all but seed eaters, and that Indian seed eaters were not much, and that if I wanted to go in for birds in the style desired, some return must come from the birds themselves. Exotic Finches and small Parrakeets were evidently indicated; my own wishes, quite apart from these considerations, also indicated these birds, which was just as well for the other considerations. The puzzle was to get them, and this remained practically unsolved till my Calcutta visit. True, I did pick up a few odds and ends in Lahore and Pindi, but nothing that really filled the bill, *i.e.*, exotics. R. B. Saniyal Rai Bahadur, the Superintendent of the Calcutta Zoo., did indeed send me a nice small lot of about 20 by one of our little men returning sick from China. I fancy both he and Mr. Finn were put to much trouble over this lot. The little man let a cat get at them at Pathankote, our nearest railway station, 40 miles off, and I received about ten only. These I did not get much good out of as we left shortly after for a year's garrison duty in Chitral, and I found precious few of my birds left on my return. Still my best thanks are due to them both. I might mention here that I do not recommend aviculture out here (the same at home I fancy) as a paying business owing to the want of a market and the huge difference between buying and selling prices, but still with seed eaters it is not a very expensive game, with ordinary luck. It is rather like putting a little regularly in a bank, having put in a fair amount to start the account, and every now and then pulling out a fat dollop; the chief difference being that one pays commission instead of receiving interest. In time one could get square, or even make a bit, always supposing that one put a check on buying fresh birds, which is absurd. I often think it is really a good thing for the family that I cannot buy birds except on rare occasions, and that then I have usually to take what I can get.

Whilst in Chitral fate willed that I should become a house owner, and after that my mind was full of aviary plans, and schemes by which I could fill them, mostly fanciful, but I have got nearer my desires in this line than I ever expected. Of course my mountain stream aviary, in natural surroundings, with Forktails, Redstarts, and Chats of different sorts, with a few Dippers, Whistling Thrushes, &c., was never serious (must wait to win a Derby Sweep or two for that) but I am now nearer that than I ever expected to be, but that is another story, so are the Gouldians a Commissariat Babu brought up for me from Calcutta. If I start on them Mr. Editor will be wanting to rename this effusion, and indeed, as it is, my readers will be wondering where Calcutta comes in, and what is my idea of brevity. However the title includes collecting, and I shield myself under that. On the way back Pindi produced two young Budgerigars (both turned out cocks) for Rs.12 (16 shillings) and a few Canaries I did not really want. This was at the end of 1903.

Then followed unproductive letters and unproductive visits to Lahore and Pindi, my total bag consisting of a few Indians and a pair of Cockatiels for which I gave Rs.15 and exchange which he had the nerve to sell in the station for Rs.10 (this happened on the only occasion a dealer visited this place). By the way Rs.15 equal £1, 16 annas or pence to the rupee. During the summer of 1904 my aviaries were being built, and no birds to be got. Small finches, especially Zebras, became almost a nightmare, and if the Lahore dealer had had a grain of sense and enterprise, he could have made a small fortune. But thank goodness, he had only one idea, to buy what was cheapest in hopes of being able to sell dear and his cheapest did not suit me even sold cheap.

In October 1904, as usual, we went to camp for manœuvres to stay to the end of February, Hushiarpur, near Jullundur, being the scene of conflict that year. My aviaries, which the contractors swore to have finished by August, only wanted a bit of glazing work and the flight wire, and were to be ready by our return, so more schemes to get birds were projected and more letters written further afield. I spent ten days, Christmas leave with my family, who were to accompany me into camp after. Here I got a maddening letter from a dealer at home enclosing his present price list, stating that prices varied according to season, but that he would gladly sell me anything he had in stock at current prices, whenever I should call on him at home. Bless him for a fool ; I had sent him a list of common or commonish hardy seedeaters, all easily procurable at any time, asking him how far down the list, or about how far down, missing none out, would he be able to have delivered to me at an Indian port for a certain sum, £15 I think, and if he could arrange to have them delivered up country and at what extra cost, or would I have to send a man to fetch them up. Out here birds have to be accompanied by an attendant on rail journeys of over 300 miles. At Lahore I got some Bengalese and Javas (grey and white), returning rather pleased with them, but more than ever despairing of the Lahore dealer trying to obtain my wants for me. At the Station a notice caught my eye to the effect that during the Christmas holidays return tickets could be had for single fares. I had before formed the idea of going to Calcutta myself (it would be useless to send a man) and it seemed incredible to me that such birds as Budgerigars and Zebra Finches should not be procurable there as I was informed by a Calcutta dealer and the Lahore man. Expense was of course the objection, "intermediate" was seriously considered but nothing came of the idea. Anglo-Indian readers will know what "Intermediate" is, it is a bit different from third at home, in fact most people who travel third at home rather shy off second out here. Personally I have had more amusing journeys out here when going second.

I found out that a second class return ticket would cost about Rs.50, but then of course extras in such cases come heavy. This, I think, was on the 19th or 20th December. I naturally wanted to spend Christmas day with my family, and there was no time to go after, so a consultation resulted in seeing me in a second class carriage in the 4 p.m. mail for Calcutta on the 21st.

The next day in the train was chiefly spent in making out lists of what I would buy if luck was in, and if luck was out, of what would satisfy me for the expense and trouble. The latter was almost cut down to Zebras and Budgies, with possibly a hen Gouldian, which was badly wanted, but really hardly expected. I arrived at Calcutta a bit before 6 a.m. on the 23rd and hastily shoved my bag into a disreputable second class ticca ghari, chosen with a purpose, which purpose also kept me from a shave and clean up. Altogether I think I looked the mean white. Drove straight to the Chiria Bazaar, Tiretta, leaving the ghari a little way off with orders to come up soon after and wait. It was a bit early, but I was glad to see that I should do a bit better than my lowest hopes at any rate, as Budgies and Zebras were staring me in the face. But of course no purchases were to be made yet, so, tearing myself past the first shop, I began to look round and make enquiries as to the price per dozen of Bengalese and Avadavats. However, I soon saw that my first glance had taken in about all of interest to me and soon became the possessor of a large cage and six each of Zebras, Budgies, and Blue-crowned Hanging Parrakeets at prices much the same as at home, bar the last, these by the way were all hens or young cocks; the cock takes two years at least to get really full plumage (in captivity at any rate) of which more another day.

Leaving Tiretta well satisfied, I drove in search of Ruttledge's unworthy successor Scott, I say unworthy as, though he has done me well, yet he has practically given up birds now and small blame to him under the circumstances. After a beastly drive, the road was "up" in most places and the ghariwalla was not too sure of the way and I could not help him much as I had previously always come from the Alipore or Dum Dum side, arrived and was met at the entrance by a European, presumably Mr. Scott. Here my mean white game failed absolutely as, after a fruitless look round on enquiring after my sort of bird I was met with "Oh, I suppose you're the gentleman who has written me so many letters for this kind of bird." I owned up as gracefully as I could, rather wishing that I had cleaned up a bit, which was intensified on being told that Mr. D. Ezra might be able to help me, but, that if I wanted to catch him at home I had better go at once. I had intended to call on Mr. Ezra in any case, being fellow members of the Avicultural Society, but not till later. The advice was good and I came away glad I had gone there, although I got no birds. There were some Parrots, English Finches and Insect Eaters, but nothing in my line. I found Mr. Ezra at Chota Haziri in the usual kit worn at that time and received a cordial welcome, which made me almost forget my unshavedness. I more than regret my not having made better use of my time with him, but my attention was rivetted on a large cage of small birds, and his treasures were rather wasted on me; they were treasures too, including six or more Birds of Paradise of about four varieties and I scarcely did more than glance at them. Please remember that I had to catch the 9.30 p.m. that night to get me back for Christmas day, and that I had come down to buy, and such rarities were beyond me. There were also some lovely Lorikeets and some rare Albinos.

A proper description of all would require an article to itself. Like most aviculturists Mr. Ezra generally has some surplus to dispose of, and I believe under the circumstances he would have let me take almost anything he had, and it is due to his kindness then and afterwards that my visit to Calcutta was a real success and that my aviaries eventually filled up ALMOST enough to please me. Was there ever an aviculturist whose aviaries are really full, however crowded they may be? I have to own up that the birds that really impressed me were what I took away, and those I fain would have taken away, *i.e.*, those in my line. The former consisting of six Cherry, six Chestnut, and two Parson Finches, two Redrump Parrakeets, and I think some other small birds, but cannot remember what without looking it up, and I dare not start looking up things or this will never be sent in. Among the latter were Mealy Rosellas (real beauties, I do not know how I came to leave these, however I got some of them later, but Dr. Greene's lukewarm account of these lovely and charming birds put me off), Yellow Budgerigars (also obtained later, did not do so well with me) and Alario Finches.

Then I went off to breakfast after a much-needed clean up. The manager of the hotel was most interested in the birds and said he had some I might take. I found four Striated, four Black-headed, and four Three-coloured Mannikins to my liking to fill up, but left them till later in the day. Then I dashed off to the Zoo. and visited my friend (on paper only till then) R. B. Saniyal Rai Bahadur, the Superintendent. I was sorry to find him seedy, so he could not take me round. He told me there was nothing for sale in the Zoo, and that rather damped my interest. The birds all round were distinctly good except in my line, which was just as well, as in my then state of mind I should have been almost capable of heavily bribing a keeper to have an accident, or at best of uselessly worrying the Superintendent.

Back to the hotel to find the birds from Mr. Ezra waiting for me. Back to the bazaar to get another cage and have another look round. Here I found a very different state of things from the morning. More than double the number of shops were open and there were crowds and crowds more birds, though not much more in my line. Still I got hold of four Red Rosellas, not in the best plumage, after much haggling. I found, too, a considerable difference in the prices asked, the mean white game evidently had some result. There were several varieties of Buntings and Finches (Indian). A nice pair of Red-crested Cardinals were to me a sore temptation, but I think the thought that I really did not want them had more to do with my success in resisting than the knowledge that the price was more than I felt I ought to give.

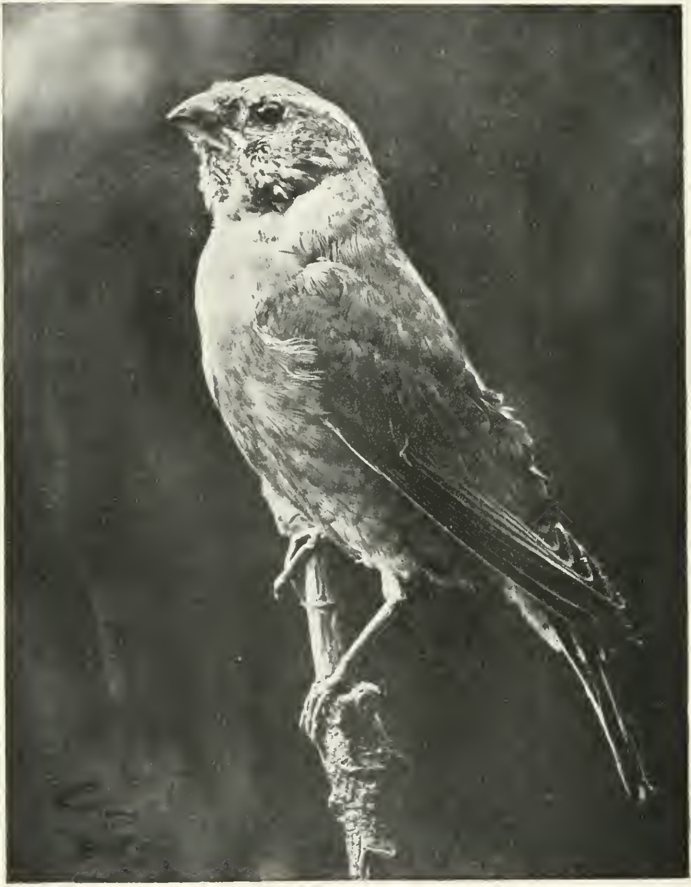
(*To be continued*).

Editorial.

THE PUGNACITY OF THRUSHES AND OUZELS:— Quoting again from Capt. Perreau's instructive letter, another of his interesting field experiences, which I am sure will prove of interest and practical utility to many of our members who indulge in the family TURDIDÆ. As I read the original notes, I ardently wished that Capt. Purreau had also been a devotee of the camera, then we could have had illustrations of the tree, nest, and young. I have kept the Grey-winged Ouzel, and kept it with Waxbills and small finches, and as already recorded in *Bird Notes*, it never harmed one; but I have only had one specimen, a male. I wish to qualify what I have previously written, that if these birds are kept in a mixed series of various sized birds, only an odd male should be put in, as it is very evident that when nesting, they would be most unsafe company for their smaller fellow captives.

Capt. P.'s notes speak for themselves.—" I must add that " they are pugnacious indeed, and have caused numerous " losses in the aviary (in addition to other expenses) as I have " twice caught the Grey-winged Ouzel aided by the Magpie " Robins devouring or attempting to devour mangled Java " Sparrow nestlings, I do not know which (if either) started " the game, but I get no Javas in that aviary; Javas seem " rather fools, Pekin Robins always defeated them while all " others (including Zebras) in that aviary successfully brought " off young (of course I mean the ones that tried to breed). " However I have Javas in another aviary, sodo not mind much, " though this sounds brutal.

" I fancy Ouzels, etc., are rather unsafe with nestlings; at " Kajiar I found my first Tickell's (real ones they were, I caught " the hen later) nest by watching the old ones beat off a pair of " Red-headed Laughing Thrushes. I should never have found " the nest otherwise though they had young, the old ones " were awfully cautious and the nest as usual was quite invis- " ible except from just above (in the tree itself). The Red- " heads were evidently enemies to be feared and were most " persistent, I watched them for quite an hour, and how long



CUTTHROAT x RED-HEADED FINCH HYBRID.
(*Amadina fasciata* × *A. erythrocephala*).

"they had been going on before I came and how long they "would have gone on if undisturbed by me, I do not know. "However they did not return to the attack later, they may "have thought I took the young at once as a Langur (probably "I was a new sort of monkey to them) would have done.

"They watched me while I was in the tree (I could not "even in the tree, and the place well-marked, at first find "the nest, the cutest I think I have come across, in thick ivy "with ivy above) I did not see them again after coming down; "though I watched for some time again both to identify the "tree (I did not take the Tickells' young for some days and "then only under the impression, till I caught the hen, that "they were G. W. Ouzels, and there was certainly a cock G.W. "knocking about in the fight with the Redheads, likewise "another Laughing Thrush--not identified at first sight—not "unlike Black-throated Jay but smaller and an undoubted "Thrush) and also to see whether by any chance there was "not another nest in the tree. I've often found birds seem to "clump together and the tree was quite capable of holding "another nest, unseen in spite of my having been over it "pretty thoroughly.

"I am sure this nest was a Tickell's, as I afterwards "caught the old hen by using a sort of sieve trap with a young "one under it as a bait or rather decoy, even then so cautious "were the old birds that they did not feed the young for five "or six hours and I had to change the decoy several times to "feed the poor little beasts. I never afterwards during my "stay at Kajiar saw so many birds in one bit of jungle as I did "the evening of that fight. Kajiar promised splendidly but "did not come up to promise; the fight occurred the evening "of my arrival."

I should say Capt. Perreau's notes were not penned for publication, but for my private perusal, and I hope Capt. P. will pardon my putting them almost as written, for I feared to rob them of their piquancy by re-arrangement.

THE CUTTHROAT × RED-HEADED FINCH HYBRID: As mentioned in our last issue, this nestling met with its death by drowning; the accompanying photo will indicate that it was an exceptionally fine and well developed fledging for it met with its untimely end only two days after leaving the nest. There is really little todescribe. It was a male, and the band of scarlet across the throat was already distinctly indicated, the crown showed no indication of red, but the pen feathers on the forehead, also between beak and eye and under the lower mandible, were just bursting, and are brick-red. The general body colouring resembled that of the Cutthroat, consisting of fawns and golden-browns; the light crescentic scalings of the undersurface of the Red-headed Finch are only just indicated in the hybrid (see photo.), and are merely paler fawn, whereas the Red-heads have these markings very distinct and almost white in colour. The dark penciling of the under surface of its male parent are entirely absent in the young hybrid. It is very probable that the various markings (fully brought out in photo, which is life-size) would have become much more decided had it lived to have assumed adult plumage. In size it will be seen that it was at the time of its death fully equal to the Red-headed Finch. It is rather risky expressing an opinion, especially as the feathers round the beak had only burst at the tips, but it appeared to me as if the scarlet of the band across the throat would have clashed with the brick-red plumage round the beak.

WINTERING TANAGERS OUT OF DOORS: In view of the interesting article by our esteemed member, Mr. Harper, it may be of interest to many if I briefly state how my birds have fared so far. In the first place, I may say, my aviary is simply a piece of the garden netted in, with a lean-to shed at the back, which is *entirily open at the front* (S.). In May last I turned out my pair of Blue Tanagers; in August, a very fine Scarlet, and in late September, a ♀ Maroon. As all our members are aware, with the exception of two short spells, it has been one long Winter all through 1907; Mr. Harper makes an appreciative reference to their condition, when he saw them in mid-October, and I may say that to-day, November 30th, that condition is unchanged. And what a glory they appear, in contrast to their environment of the past fortnight, at any rate. However low the temperature may fall, they can be put to no more severe test than that they have experienced this past month, raw cold, fog (not lifting all day on several occasions), wet, with an occasional genial day sandwiched in between; the whole being a condition of trying *variableness almost* beyond description.

INTERESTING ADDITIONS TO THE ZOO.: Just on going to press, information comes to hand of an interesting addition of twelve birds, which have been presented by the Government of New Zealand, viz.; three Kiwi (*Apertyx australis*), three Keas (*Nestor notabilis*), one Weka or Wood-hen (*Oeydromu australis*), one Earl's Weka (*O. earli*) four (two pairs) Variegated Shelldrake or Paradise Duck (*Tadorna variegata*). All of the above are of special interest, and are worth the careful observation of any member visiting the Gardens. Other interesting recent additions are: The Himalayan Jay (*Garrulus bispecularis*), and The Fiscal Shrike (*Lanius collaris*). Both these are well known birds, but now figure for the first time in the Society's collection.

Erratum: Page 232, line 7 for verticle read *vertical.* Page 235, line 8 from bottom, for site read *sites.* Page 251, line 18, for they some read *they soon.* Page 233, 4th line from bottom, for nest of twigs, read nest of *bents.*

Correspondence.

RESIGNATION OF DRS. CRESWELL & CLARKE.

Sir,—With many regrets for the necessity, I am desirous for my fellow members of the Foreign Bird Club to note that I wish to resign the Presidency of the Club forthwith, and membership thereof at the end of the current volume of *Bird Notes.* W. Geo. Creswell.

Sir,—In asking you to note my resignation of the office of Vice-President of the F.B.C. forthwith, and membership at the end of the current year, I think you will not object to my saying that I have explained my reasons in correspondence with yourself, and my original intention was to send a very few lines for publication in *Bird Notes*; but you pointed out that this might give rise to misapprehension and possibly unfounded suspicion prejudicial to the interests of the Club, and that it was desirable that I should state my reasons a little more fully, and I therefore decided to do so; at the same time I shall endeavour to make this explanation as short as I can, as I think no good purpose will be served by a lengthy correspondence in *Bird Notes.*

To explain my position, it is necessary to mention that more than twenty years ago—having suffered from a severe visitation of what was generally known as "the bird plague"—I began an investigation into its nature and origin, and the most promising methods of treatment of which practically nothing was known. It proved to be a much more extensive research than I anticipated, and I pursued it on and off for a good many years, in the course of which I met with numerous outbreaks of the disease in many different aviaries, and had exceptional opportunities for studying it. I examined many hundreds of birds, made many thousands of microscopical preparations, a considerable number of which I still possess. The notes, records, drawings, photographs, etc., which I still have, would fill a large volume, but it would be a costly thing to publish them; there is little demand for works of that kind, and I am not prepared to undertake it, but I have, from time to time, published the practical conclusions, of which I was sure, in papers and lectures; and Dr. Creswell, who has had access to all my material besides what he has collected himself, recently published a good account of the disease in *Bird Notes.*

Now I have recently seen in the *post mortem* reports in *Bird Notes* statements relating to Septic Fever, which I consider to be entirely erroneous and misleading, and I would undertake to satisfy any scientific authority who would go through the evidence that they are so. But even if *Bird Notes* were a suitable field for a long technical discussion I have neither the time nor inclination to engage in such disputes every time I notice erroneous assertions; time will show that my statements are true and that is enough for me. But it is another thing to identify myself with errors which are in some sense official, and to remain a Vice-President, or even a member of the F.B.C., without repudiating, is equivalent to endorsing them, and under these circumstances—unless I wish to engage in a lengthy controversy—the only alternative is to divest myself of any responsibility for what I disapprove, and terminate my connection with the Foreign Bird Club.

R. H. CLARKE.

[On receipt of above resignations, I at once urged the writers to reconsider same, and to enter a protest or point out in the pages of *Bird Notes* any teaching or views which they considered erroneous. The resignations were sent in for November issue, but they acceded to my request to hold them over till the following number. I failed to accomplish anything further, and nothing remained for me but to refer the matter to the Council. The correspondence passed round left the Council no alternative but to accept the resignations. There was a general expression of deep regret at this necessity and also of appreciation of the valuable services they had rendered to the Club. There was a further general expression of regret that they had not protested against, or pointed out in *Bird Notes* the "erroneous teaching" of which Mr Clarke complains, for Dr. Creswell refused to give any reasons, and asked to be excused from any further communications referring to same.—ED.]

SIR,—I am much surprised at Mr. R. H. Clarke's resignation, and extremely sorry that it should be caused by a note of mine in reply to a correspondent.

All who know Mr Clarke recognise his worth as an original observer and a scientific worker; none more than myself. But I venture to think that even the most acknowledged authority on pathological subjects should not take hasty action merely because some one has the temerity to not fully accept his results as final. There is no finality in Science, and even the most careful research may not reach perfection.

Whilst I quite recognise Mr. Clarke's work on "Bird Plague" as being perhaps the most thorough and up-to-date of any direct experiments, I may surely be excused for having opinions of my own.

Mr. Clarke complains that he has "recently seen in the *post mortem* reports in *Bird Notes*, statements relating to Septic Fever, which I consider to be entirely erroneous and misleading." He considers that without repudiating these errors he might as a Vice-President be thought to endorse them, and so he sends in his resignation.

If I am in error in expressing an opinion not accepted by Mr. Clarke I feel that my sin is altogether disproportionate to the penalty inflicted upon the Foreign Bird Club, by the resignation of Mr. Clarke.

All I say in defence is that other men in this country and on the Continent have interested themselves in the diseases of birds, and that I have made myself acquainted with their work. I have myself kept birds and observed their diseases. Upon my own observations and the recorded experience of others I penned my note to which Mr. Clarke objects.

I am not cock-sure of my knowledge. I allow that it may be supplemented, corrected, or approved by future research, but meantime I adopt Mr. Clarke's words, that "time will show that my statements are true and that is enough for me."

One thing is certain, that time will elucidate the truth, and that is all I aim at. I shall be only too glad to acknowledge my errors in the light of conclusive evidence.

HENRY GRAY, M.R.C.V.S.

LONG-TAILED GRASSFINCHES PAIRING WITH PARSON FINCHES.

SIR,—For some time I have had a pair of Parson Finches in a small aviary with other foreign finches. During the summer I had a pair of Long-tailed Grassfinches sent to me. I was surprised to see how very nearly these birds resembled the Parson Finches, except in the colour of their beaks. On endeavouring to look them up in two or three books, I could find no description or mention of them. I turned the Long-tailed Grassfinches out with the other birds, and now notice that they have paired with the Parson Finches, *i.e.* one of each species with one of the other.

I should be glad to know, through *Bird Notes*, if the Long-tailed Grassfinch is a *distinct* species, or if it is at all related to the Parson Finch. If so, s it unusual for them to pair together? EVELYN DENNIS.

The Long-tailed Grassfinch (*Poephila acuticauda*) is always regarded as a distinct species from the Parson Finch (*Poephila cincta*).

The genus *Poephila* comprises six species, and, as has been pointed out by Mr. R. Phillipps, Mr. Seth-Smith, and others, these six fall into three groups of two—the two in each case closely resembling each other and differing markedly from the other species. *P. acuticauda* and *P. cincta* are certainly much alike, and hybrids have been freely bred, but I have never before heard of deliberate cross-pairing when the birds have the opportunity of mating with examples of their own species. This incident in Mrs. Dennis's aviary is of great interest.

Such cross-pairing constantly occurs between the Red-headed Gouldian Finch (*P. mirabilis*) and the Black-headed (*P. gouldiæ*), and indeed these species (if distinct species they be) appear to prefer the opposite sort to their own kind, so that what has happened in the case of Mrs. Dennis's Longtails and Parsons is quite what might be expected in the case of Gouldians. Probably the third group, consisting of the White-eared Grassfinch (*P leucotis*) and the Masked Grassfinch (*P. personata*), would behave in the same way, though I do not think that this has yet been recorded.

One might say that this phenomenon throws doubt on the specific distinctness in each case—but then, after all, no one knows what a species really is. HORATIO R. FILLMER.

[Two odd birds, a male *P. acuticauda*, and a female *P. personata*, paired, built a nest, and sat closely on three eggs, for three weeks; the eggs were clear. During the Autumn moult (1905) *P. personata* died. Now an unmated *P. gouldiæ* is paired to the *P. acuticauda*, but so far nothing has resulted from the union. ED.]

Post Mortem Reports.

(*Vide Rules*).

BLACK-FACED SERIN. (Mrs. Warren Vernon). Diseased liver and inflammation of lungs.

It is a common occurrence for a bird apparently well to die suddenly, and on *post mortem* examination to find evidence of disease of some standing.

Cock Colour-fed NORWICH CANARY. (Miss M. Gibbons). Cause of death was pneumonia, probably from a chill caught at a Show. Canary seed and perhaps German summer rape are quite sufficient to keep such a bird in good health.

I have not seen the Avadavat. It was not in the box with the Canary.

Changing birds about from place to place at this time of the year renders them liable to a chill.

Cordon-blues, Firefinches, and Golden-breasted Waxbills are not delicate birds if they are not exposed to infection in dealers' dirty shops or in an infected aviary. I have kept these species out for two summers and two winters. They are very *susceptible* to some of the infectious diseases of birds but not more so than many of our British birds.

Cold of itself does not cause disease; but changeable weather especially from a dry cold or heat to wet is a very great predisposing factor. This is not peculiar to birds as all animals are influenced in the same manner.

Give any bird suitable food, suitable shelter, plenty of room in which to take exercise, and a clean or dry ground surface, and I believe it will maintain itself in health in our changeable climate. Of course it must be healthy at the commencement.

Answered by Post:

Miss V. BROMWICH.

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BIRD NOTES:

THE JOURNAL OF

THE FOREIGN BIRD CLUB.

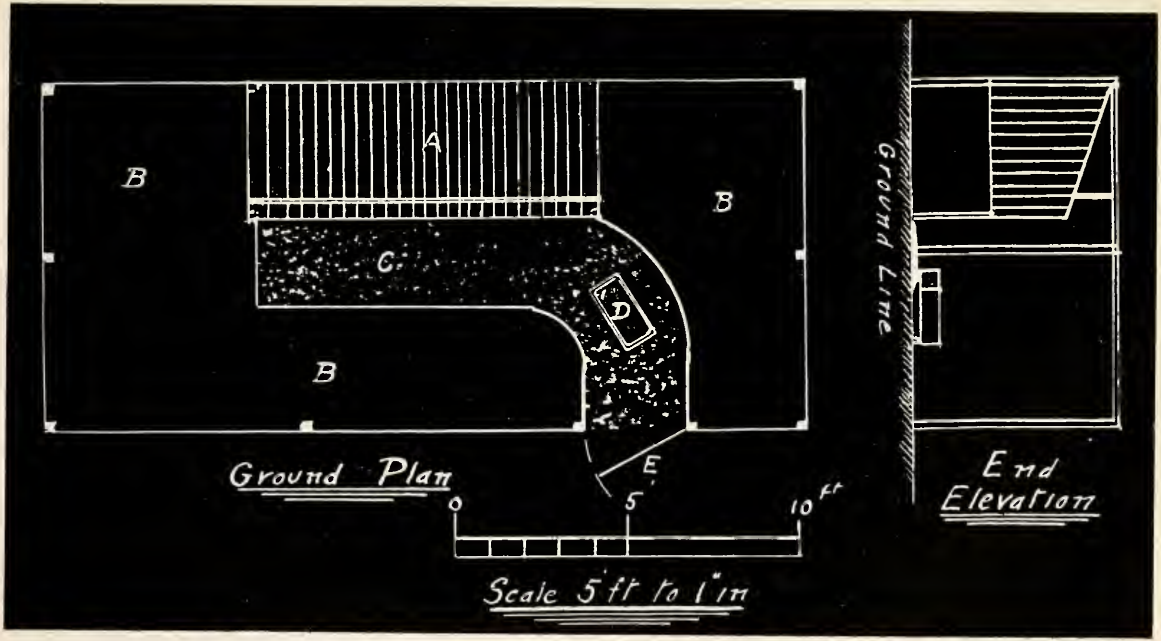
My Aviaries and their Inmates in 1907.

By Wesley T. Page, F.Z.S.

This record must open with an apology for inflicting more of my own composition, but members have evidently forgotten that there is a January issue of *Bird Notes*, so this is written against time to meet the emergency.

The Aviary: Plate I., is not as it was in 1907 but several years ago, when its inmates were less in number and less varied in kind, consisting mainly of Waxbills and the smaller Finches; now their number and variety have increased, all the growth has disappeared, the only greenery the birds will permit to grow is rape, oats, wheat, etc. A detailed description is not called for, as the photos and the ground plan fully describe this: briefly, its area is about 25ft. × 12ft. × 8ft. high, with a lean-to shed at back, the shed being entirely open at front. No design was attempted, the object being to enclose a piece of the garden as unobtrusively as possible, the whole being painted with brunswick black. As it appears at present is figured on plate II., which also includes a portion of my outdoor bird-room, which is really a greenhouse. All the enclosures therein have wooden tops 6 inches below the glass, and I find it answers its purpose admirably. The only part of the aviary which is covered in is the shelter shed, 10ft. × 4½ft., all the other being open at top and front; the sides and back consist of boundary walls. It has fully answered its purpose and the death rate has been very low. I have almost regretted so increasing the number of its inmates, that the beautiful effect of a jungly growth of plants and bushes has disappeared; the charm of seeing Gouldians, Waxbills, etc., among the green foliage, only lasted two years, and is now but a memory. But I console myself, I'm not alone in this respect, for I fear the aviculturist does not exist who can restrict his birds to a given number. A species he has not before kept appears on the market and he is lost, and so the story runs. Neither need I say anything about furnishings as these are sufficiently indicated in the various plates. As to cost this need not be heavy, the aviary herein described cost me about £7 for material, nothing for labour as I erected it myself; but with personal supervision, and a correct plan to begin with, it should not cost more than £15 where outside labour has to be called in, as is unfortunately the case with myself now.

THE INMATES for 1907: The bulk of these can be very rapidly passed in review, as they have a place, not for breeding purposes, but because of their beauty of plumage and interesting characteristics. Of the Weavers I possess only six species, the Common Red-billed Weaver (*Quela quela*), Madagascar (*Foudia madagascariensis*), Black-headed (*Hyphantornis melanocephalus*), Half-masked (*H. vitellinus*), Orange (*Pyromelana franciscana*), and the Grenadier or Oryx (*P. oryx*); the Half-masked is not yet wholly out of colour. They have not harmed their fellow captives, though when in nuptial plumage, quibbling among themselves. Of Doves I have only two species, the Indian Green-winged and the Diamond, the first-named have made no attempt to breed, while the latter have successfully reared to maturity six pairs, and had in addition two abortive attempts, one at each end of the season. Their soft colouring is exquisite, and the display of the male is most interesting, while their coo is almost musical; I can strongly recommend them to my readers as a most pleasing species to keep, being beautiful, minute and amiable to all but their own kind. I will first note those that have bred or made attempts to do so, merely naming other kinds or I shall weary with undue length. The Indian Silverbill (*Aidemosyne malabarica*) nested and successfully reared one young, which was on the wing by end of March and still lives; several other abortive attempts have been made; in each case they chose a nest box, several appear in Plate III.; and they have made no attempts to build in the branches; on each occasion the box chosen was


B
A
B
C
D
B
E
Ground Plan
0
5
10 ft
Scale 5 ft to 1 in
Ground Line
End Elevation

A. Skeleton Shed, open at end. **B. B. B.** Flight, ½in. wire netting at top and front.
C. Gravel Path. **D.** Glazed Sink, sunk to ground level, as Bath. **E.** Entrance to Flight.

hanging in the open portion of the aviary. I had only one African Silverbill which paired up with a Pectoral Finch, but though several clutches were laid, none hatched out, and during one of the cold spells the Pectoral (♀) died egg-bound. Red-headed Finches (*Amadina erythrocephala*) laid several clutches and incubated closely but without any result; the male died from tumour over the eye, and the hen, as already recorded in *Bird Notes*, paired up with a Cutthroat and hatched out one young hybrid which unfortunately got drowned two days after leaving the nest. Of the doings of Zebra Finches and Java Sparrows I need give no account, the number of young reared being far below the average. Yellow-rumped Finches (*Munia flaviprymina*) have laid, but appear very poor sitters and from two clutches of eggs there has been no result. Of Mannikins at present I only possess the Bronze-wing and Magpie, odd birds of each, which paired and after several abortive attempts successfully reared one young hybrid, of which details have already appeared under Editorial notes. The attempts of Gouldians, Ruficauda and Long-tailed Grassfinches, have all proved unsuccessful, though in several instances young have been hatched, but only partially reared; mostly I think being starved during the cold spells, which have been so frequent all through 1907. My Spice Finch + Bengalee hybrids have been very busy pairing and nesting, three clutches of eggs have been laid, all of which were infertile. Yellow-rumped Serins (*Serinus angolensis*), a pair of this interesting species were kindly presented to me by our esteemed member, Mr. Teschemaker (who has bred the species), the hen unfortunately dying egg-bound with the last egg of the clutch; and when I obtained another female later it was too late for results this year.

Varied Lorikeets: This lovely species once acclimatised is as hardy and accommodating as the Cockateel. I found my pair too much trouble to keep clean in a cage, so early in the spring they were turned out of doors into the general aviary, not with the Parrakeets, as the Varieds must have milk sop, and I do not care to introduce this diet into the Parrakeets aviary. I have found them quite amiable and their condition this morning (December 31st) is perfect, for I have not seen tighter, sleeker or better coloured specimens, not even on the Show bench. They have made no attempt to breed. The one trouble of out-door life for these birds is, that in frosty weather you must thaw their sop at least twice a day. Of the *Spermophilæ* I have only at the present time, out of doors, males of Black-headed Lined and Fire Red Finches, and they are standing their out-door life well.

Of Cardinals I have three species, the Green, Pope and Grey. The Greys and Popes have nested, but so far as I am aware no eggs have been laid. The Greens (*Gubernatrix cristata*) have nested again and again, in fact have hatched out six broods of three or four each during the year, but have made no attempt to feed after the first three or four days, and it is almost impossible to keep up a supply of insect food, in a mixed series of from eighty to ninety birds.

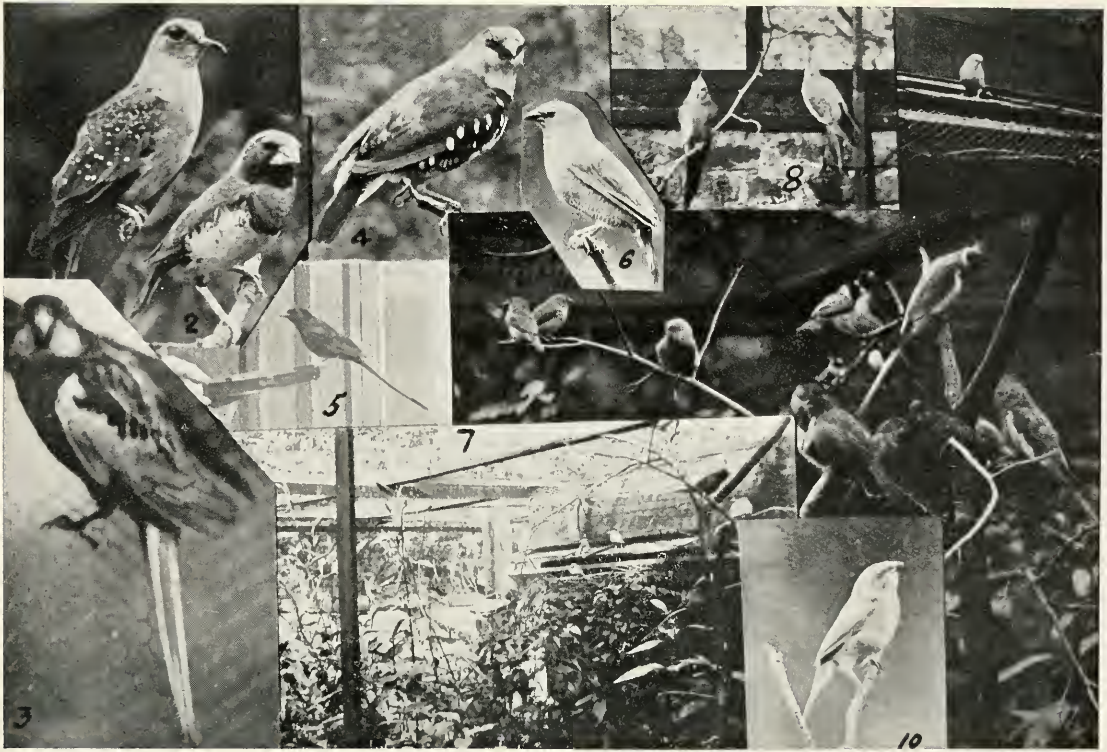
The Cow Birds, of which I possess males of the Silky, Ruddy-shouldered, and an unidentified female, most fascinating in a large aviary, though very wild and unsociable in a confined space, are nevertheless marvels of beauty and grace where they have space for flight; but as I have already described the Ruddy-shouldered in last volume of *Bird Notes*, and our esteemed member, Mr. Millsum, has recently given an account of his partially successful attempt at breeding them, I had better bring this account of my aviary and its inmates to a close; simply remarking that the Budgerigars and Cockateels have been almost a failure compared with previous years, though their condition has been as fine as it well could be. Rosellas have as yet made no attempt to breed, being at present only about eighteen months old.

I must not however close without some account of the Tanagers. My pair of Blue (*Tanagra episcopus*) have been in very finest condition ever since they were turned out last May, and more or less during the year have been gathering together and carrying about sticks and bents, yet have not so far completed a nest. Their beauty, even the exquisite plate in our last issue does not do full justice to; the plumage changing from green to blue and blue to green, and also varying in intensity as the light plays upon it, with each different position they take up. The Scarlet does not call for special mention save to say that it reached me, an acclimatized bird, in late August, and for tightness and lustre of plumage it could not be surpassed. The Maroon (♀) did not come into my possession till early October and was then in moult; I took the risk and turned it out of doors at once, and it is now in very fair plumage and excellent health as I write, December 31st, the latter remark as to date and condition applies to all three species.

I am the fortunate possessor of a true pair of Jacarini Finches, the female being brought over for me by my esteemed friend and fellow member, Mr. E. W. Harper. It arrived in poor plumage, but is now perfect and apparently in the best of health, and I hope to successfully breed the species next season. I am of the opinion that my female is the only one in this country at the present time.

THE BIRD-ROOM (Plate II.). Its arrangements are very simple and its proportions are exceedingly modest. This, owing to physical infirmity I had to have erected, and it was comparatively costly, reaching a total of nearly £20 by the time it was fitted complete. Its size is only 10ft. × 5½ft. × 6ft. at eaves and 9ft. at ridge; it is of the lean-to type. Its space is almost wholly given up to birds, barely sufficient being retained for viewing and attending purposes. The back supplies four enclosures, each 5ft. × 3ft. × 4½ft. high; one side gives an enclosure about 4½ft. square and ranging from 5ft. to 7ft. high; the other side supplies space for four cages only, for I do not admit any smaller than 2½ft. × 1½ft. × 2½ft. high. It fully answers the purpose for which it was erected, viz.: for housing such rare species as I do not care to trust outside, or which are not to be trusted in a mixed series; and also to provide accommodation for such as arrive too late in the year to put outside.

It contains at the present time a very tame and talented Shâma, a rare Hangnest (*Icterus xanthornis*), pair of Red-breasted Marsh-birds (*Leistes guianiensis*), Quaker Parrakeet, Jendaya Conure, Lavender-backed Finch, Fire-red Finch (♀),



SNAPS IN THE AVIARY. *Photos by E. O. Page.*

3
2
1

Black-headed Lined Finch, Tropical Seed-eater, and a rare Black-cheeked Tanager (*Calliste cyanea*), this latter I believe to be the first living specimen to reach this country, and was imported by our esteemed member, Mr. E. W. Harper.

In this hurriedly written account I have noted the birds as I happened to remember them, not attempting any given order or a complete list.

In conclusion I must mention that for two or three years I kept the Budgerigars and other Parrakeets with the Finches, but in the end I had to separate them and they now occupy another enclosure, there were too many broken limbs, and slain fledglings to keep them together, though so far as I could trace, the Budgerigars alone were the offenders.

Plate III. SNAPS IN THE AVIARY.

1 Diamond Dove
2 Chestnut-breasted Finch
3 Red Rosella Parrakeet
4 Diamond Finch
5 Shâma
6 Aurora Finch
7 A corner of the Aviary
8 Cockateels
9 Blue Tanager
10 Orange-cheeked Waxbill
11 Group of Budgerigars, Cardinals, Cockatiels and Ruficaudas at tip of branch.

Plate IV. SNAPS IN THE AVIARY.

1 At Xmas Breakfast, 1907.
2 Yellow-rumped Serin
3 Zebra Finch.

The Red- or Blood-rumped Parrakeet.

(*Psephotus hœmatonotus*).

By A. SAVAGE.

The Editor has written me, on more than one occasion, for an article for *Bird Notes*, but owing to frequent absences, I have not been able till now to comply with his request. His last appeal is since Christmas, and as I am at home till after New Year's day, and he says on what subject—"Redrumps"—he would like a few notes, I am hurrying up and sending the following. But as most of what I have to say here has already appeared elsewhere, and may have been seen by some of my readers, I am afraid it will only prove to be what we call in French *du rechauffé*. Anyway, it must be taken for what it is worth, and can be passed over by those who know as much, or more, than I do on the subject.

It is a good many years ago—somewhere about 1890—since I possessed the first pair of these Parrakeets, and I have practically never been without them since. They are great favourites of mine.

The cock is strikingly handsome in his adult plumage, and the hen decidedly pretty in her more sober attire; and besides the cock has a lively little song, hence, probably, the German name "The Singing Parrakeet."

With regard to the "adult plumage," I must mention that the nest feathers, of the young cocks especially, are somewhat lighter in the tints than the adult plumage, but the hens change very little. The sexes are always distinguishable, even when the birds are very young and the first few feathers appear; this is an advantage, for there can never be any mistake as to the sexes as happens sometimes with other species.

I have bred Redrumps under various conditions. My first pair had a moderate sized aviary to themselves; but my best results have been in a box-cage—about 3ft. long, 2ft. wide and 2ft. high—wired at the front only with half-inch wire, and covered with a piece of felt for privacy. The cage is about 3ft. from the ground, and made watertight with felt nailed on the top, back and sides, and stands in a position so that it gets the morning sun and until nearly two o'clock in the afternoon. In this box-cage, which stands out in the garden all the year round without any further protection from the cold, wet or heat than mentioned above, I have had between fifty and sixty young reared and sold. This is the result from several pairs, and I find one pair does as well in the cage as another.

The nest-boxes are my own make, some 8in. long, 8in. wide and 12in. deep, anything *about* this size will do, as I do not think Redrumps are particular to an inch either way. In the bottom of the nest-box at the back an ordinary wooden bowl (similar to a cash bowl) about 6in. in diameter and 2½in. deep is fixed, screwed, and the space round the bowl filled up with cement or plaster. A bowl, or cavity of some kind is necessary to keep the eggs from rolling about and thus get addled. I put two nest-boxes in the cage in case the hen lays a second clutch of eggs before the young of the preceding clutch are ready to leave the nest. The two nest-boxes are fixed on the left-hand side of the cage, near the roof, behind the felt covering that part of the wire-netting. As it is necessary to see, now and then, what is going on in the nest-boxes, I make a lid about 3½in. square in the back of each box, towards the top, and a corresponding lid a trifle larger in the side of the cage, all opening outwards on hinges and closing with buttons; inspection is then easy, when the hen is off the nest, without disturbing the parents. Five eggs are generally laid per clutch, but in 1906 I had fifteen in one clutch, all clear of course, being too many to incubate. There are usually three nests each season, and I have reared eleven young from the same pair in one season. The bottom of the cage is sanded, on drawers, and cleaned out as required.

Food is an easy matter; a mixture of Canary seed, white millet, oats and a *little* hemp; green food, chickweed and groundsel, when in season, and plenty of it when there are young to be fed.

It will be seen from these remarks the Redrump is easily accommodated and a prolific breeder; too much so, perhaps, for if he were not so easily satisfied, he would probably be thought more of—as he deserves.

Success in breeding Parrakeets, larger than Budgerigars, lies largely, I think, in housing each pair *separately*, and I am persuaded that a box-cage, similar to the one I have described, or a trifle larger, say 4ft. long, 2½ft. wide and 2½ft. high, would be sufficient for almost any Parrakeet of the Redrump size; and I should not hesitate to try breeding, with probable success, Parrakeets of the size of Rosellas, Pennants and the like, in a similar box-cage, 5ft. long, 3ft. wide and 3ft. high. The only disadvantage I know is, that when there are three or four young out of the nest, they are, with the parents, in rather close quarters, and it is necessary, with species that have more than one nest in the season, to remove the young as soon as there are signs of illtreatment to them on the part of the parent (the cock is generally the culprit) and another nest coming on. If they are too young to cater for themselves, remove the cock for a week or two, and leave them with the hen to finish rearing. Then remove the young and put back the cock, when another nest will probably be obtained. These precautions are, of course, unnecessary when the parents do not illtreat their young; but in any case remove the young as soon as they can look after themselves.

"A few points on Birds Eggs."

By J. McDonagh, M.R.C.S., F.Z.S., F.L.S.

These few points are culled from two cases recently put up in the Natural History Museum, Ground Floor, at entrance of fifth alcove on the left.

1.—Structure :

(*a*). *Yolk* : That part of the egg where development begins; it is enclosed in a membrane called the bitelline membrane, thereby separating it from

(*b*). *White*. This forms the food of the developing chick, it is thicker in parts, and these thickened bands as they really are, are called chalázae. They pass between the poles of the egg and yolk serving to keep the latter in position.

(*c*). Outside the white is a fibrous shell membrane, consisting of two layers with a small air chamber between, no air is present in perfectly fresh eggs. This air accounts for the depression on the white one sees when opening a hen's egg for breakfast.

(*d*). *Shell* generally consists of three layers, an inner, middle, and outer, made up chiefly of salts, and the absence or presence of the salts of calcium in the outer layer modify the character of this layer. When very poor in calcium salts the shell is smooth and glossy, when rich in calcium salts shell has rough and chalky appearance.

The colour of the shell depends on pigment layed down in either middle or outer layers during the passage of the egg along the oviduct.

Then comes a card showing the difference in thickness of the shell contrasting the thin shell of Duck and the thick shell of the Aepyorius, a large extinct bird of Madagascar, giving the Ostrich's as an intermediate.

The next card contains an egg of a Tern to show the various shades the one and the same pigment produces, depending upon the depth at which the pigment is formed. Superficial pigment dark and sharply defined, deep pigment light and more or less blurred.

2.—NUMBER OF EGGS LAID :

The eggs laid in one nest which are sat upon together and hatched about the same time are called a clutch, their number though tolerably uniform in each species, vary greatly in different species.

Some have only one, others two, majority four or five. Higher numbers are less common, but eight and twelve are frequently found among Ducks and Rails, and even more among some game birds.

Specimens illustrating the above facts are :

(*a*). Single egg of Manx Shearwater and Razorbill.
(*b*). Two eggs in Black Guillemot, Swift and Ring Dove.
(*c*). Three eggs in Oyster Catcher.
(*d*). Four eggs in Golden Plover and Common Sandpiper.
(*e*). Five eggs in Kestrel and Robin.
(*f*). Higher numbers in Long-tailed Tits and Red-legged Partridge.

3.—FORM :

In form eggs vary from almost spherical to different modification of elliptical or oval. The latter form in which one end is smaller and more pointed than other is the most frequent, and distinguishes eggs of birds from reptiles. If there are many eggs in the nest it is obvious that the conical form makes close packing more easy.

Where only two eggs are laid they are seldom conical.

Eggs having a pyriform or pear shape are mostly those of birds which lay four in a nest and are large in proportion to size of bird. Their pointed ends being turned inwards, they occupy as little space as possible and thus are more easily covered by the brooding parent.

A conical egg placed on the ground or ledge of rock is less liable to roll away from its place if disturbed than one of a spherical form, a fact made use of in making mechanical toys.

Cards illustrating form are :

(*a*). Spheroidal : Scops' Owl, Tawny Owl, Green Bee-eater, Diving Petrel.

(*b*). Elliptical : Nightjar, Lesser Pintailed Sand Grouse, Chatham Island Shag (most perfect).

(*c*). Biconical Sclavonian Grebe.

(*d*). True Oval : Wild Turkey, Dipper, and Grey Parrot.

(*e*). Pyriform : Dunlin Pheasant, Tailed Jacana (perfect).

A group of four Lapwing as in nest.

4.—SIZE :

Size of egg has generally some relation to that of parent bird. It also depends very much upon the degree of development the young birds attain at time of hatching.

In the case of birds in which the young are hatched in a very immature and helpless state the eggs are relatively small to size of parent. These birds usually build carefully constructed nests to contain young brood during first period of their existence.

When young are well clothed in down and can run and feed themselves as soon as hatched, the eggs are large.

Such birds usually lay on the ground in imperfectly formed nests.

Other circumstances seem to influence size of egg in some cases. Thus Cuckoo, which lays in other bird's nests much smaller than itself has eggs of a size nearly corresponding to theirs and therefore relatively the smallest o any of the class.

Cards illustrating above.

(*a*). Birds of about equal size with different sized eggs.

Curlew and Raven, former large, latter small.
Guillemot and Raven ,, ,,
Snipe and Blackbird ,, ,,
Mantell's Apteryx and Crowned Pigeon ,,

(*b*). Cuckoo in Meadow Pipit's nest.

(*c*). A card showing both extremes, the smallest egg of the Humming Bird by the side of the Ostrich.

5.—TEXTURE OF SURFACE :

(*a*). Extremely smooth and polished.

(*b*). Smooth and glossy.

(*c*). Dull and chalky

(*d*). Calcareous film.

(*e*). Surface granular or pitted.

Specimens of :

(*a*). Chilian Tinamou and Rufous Tinamou, just like glazed porcelain.

(*b*). Great Black Woodpecker, Kingfisher, and Tinamou.

(*c*). Black-headed Ibis, Nicobar Megapode, and White-headed Duck.

(*d*). Rough-faced Shag, Aui (outer chalky layer removed in part exposing a slate blue surface).
Sclavonian Grebe (ditto, only exposing a white surface).
Guira, a parasitic bird, peculiar in that several hens lay their eggs in one nest. Eggs are quite unique slate blue, dotted over with white chalky raised spots giving the aspect of some well known pottery.
Rosy Flamingo.

(*e*). Emu.

6.—COLOUR :

Colour has no relation to that of parent bird white is probably the primary colour of birds as in reptiles.

Eggs of birds laid in holes either in earth or trees entirely concealed from light are mostly white.

The larger number of eggs are variously coloured by deposit of pigment on or near outer surface of shell, it may be in irregular washes, blotches, more or less circular spots or lines upon either a white or uniformly coloured ground. The significance of the various modes of colour is not understood at all at present.

It often happens that the different species of a natural group of birds present a general similarity in the style of colouration of their eggs, or in other words that nearly allied birds have similar eggs, but exceptions to this rule are very numerous.

In certain cases there is evidently an adaptation of the colour of the egg to their natural surroundings, for purpose of concealment.

Though the greater number of species of birds lay eggs, all of which are of tolerably uniform character, there are some cases in which the eggs of different individuals of one species are dissimilar.

(1).—EGGS ALL OF ONE UNIFORM COLOUR:

Virginian Colin, Snowy Owl, Bee-eater, Grey Parrot, Spotted Woodpecker, Wryneck, Roller, White Stork, Black Stork, and Whooper Swan, white.

Wild Duck, Grey Francolin, and Pheasant, brownish.

Cetti Warbler, red brown.

Pheasant-tailed Jacana, dirty dark brown.

Nightingale, brown.

Pied Flycatcher, white blue.

Common Redstart, Indian Mynah, White-throated Jay, Thrush, Heron, and Glossy Ibis, blue.

(*a*). *Clouded.* Little Bustard, Black-tailed Godwit, Peregrine Falcon, Sparrow Hawk, and Sandwich Tern.

(*b*). *Blotched.* Razor-bill, Ptarmigan, and Red Grouse.

(*c*). *Speckled.* Red-legged Partridge, Jay, and Carrion Crow.

(*d*). *Spotted.* Black-breasted Hemipode, Pratincole, Black-throated Diver, Common Sandpiper, Redshank, Golden Oriole, Indian Wren Warbler, Willow Warbler, Great Tit, Song Thrush, Swift Tern, and Oyster Catcher.

(2).—LINEAR MARKINGS:

Red-shouldered Starling, Crow-Blackbird, Indian Jacana, and Guillemot.

(3).—EXAMPLES OF EXCEPTIONS TO GENERAL STATEMENT that birds which build in holes are mostly uncoloured.

Nuthatch, Tree Creeper, and Jackdaw.

(4).—SIMILARITY OF EGGS in a natural group of birds:

(*a*).—Icterine Warbler—Sykes Tree Warbler.

Olivaceous Warbler—Western Olivaceous Warbler.

Olive Tree Warbler—Melodious Warbler.

(*b*).—Reed Bunting—Meadow Bunting.
Ortolan Bunting—Cirl Bunting.
Yellow Bunting—Corn Bunting.

(5).—DISSIMILAR EGGS in closely allied species:
Missel Thrush, Song Thrush, and Blackbird.
Black Redstart (white) and Common Redstart (blue).
Pied Flycatcher (white and blue) and Spotted Flycatcher (brown).

(6).—SIMILARITY IN ALL EGGS of one species:
Waterhen.

(7).—DISSIMILARITY IN ALL EGGS of one species:
Tree Pipit, Tree Sparrow, Fan-tailed Warblers and Guillemot.

Wild Bird and other Avian Notes.

By the Hon. Mrs. SOMERSET WARD.

The house and grounds where we now live had been uninhabited for many years and consequently had become a happy home and retreat for Hawks and Magpies, so that it was not very surprising to find how almost all the small birds had disappeared. The few that remained kept away from the house and hid themselves among the shrubs and bushes as if afraid of being seen. The want of life and the silence were very marked, now a happier state of things exists and life and sounds are returning.

We brought with us some Fan-tailed Pigeons which had their home in the stable yard, but the Hawks that built in the ivy, covering parts of the dwelling house and the stables, soon made havoc among them; alighting on the wall above the dove-cote and carrying off their prey in full daylight and in sight of men moving about and working at no great distance. One Hawk, attracted probably by the sight of birds in a cage, actually perched on the hand rail of some steps leading up from a grass plot to a sitting-room. I watched it for some minutes before it flew away. Since that time, three years ago, their numbers have been considerably reduced and only one pair of Kestrels is allowed to remain unmolested on the top of the house. It must have been one of these that took up its position on the back of a garden seat early one morning this summer, close to my small aviary and a few yards from the drawing room windows; I watched him and admired his beautiful plumage as he sat motionless in the sunshine, not doubting that he would make a sudden dash at the wires, but he never took the least notice of the little birds and after remaining there for some time, slowly and carefully swung himself down on to the grass and began pecking about, as if looking for insects when the sudden opening of a window, however, frightened him away. As we have neither game preserves nor keepers I hope we may still be favoured with friendly visits from these handsome birds occasionally. Alluding to the aviary mentioned above, I regret to say it is now empty. The six little foreign birds consisting of a pair of Cutthroats, a female Cordon Bleu and three other kinds of Waxbills, were all found lying dead about a fortnight ago. It is supposed that the heavy rains and constant damp weather in November must have been the cause, although they lived through last winter and spring under the same conditions without any injury and were in the best of health and plumage when I left home in the middle of last month.

Feeding and Acclimatising Foreign Birds.

By Wesley T. Page, F.Z.S.

(Continued from page 241.*)*

Rape: Very few species of foreign birds will eat either English, German, Winter or Summer Rape. I have found the genus *Serinus* take a little, and one or two species of the South American Meadow Starlings; nevertheless a little is always included in my general mixture, and a little is also scattered in the open flight of aviary: here none is wasted, what the birds fail to eat sprouts and makes good green food and also cover for Quails, etc. So long as the seed is sweet, sound, and free from dust, for birds in an outdoor aviary, either kind may be given, but for birds in cages I incline to the opinion that the kind usually sold as German is the best. It is much smaller than Winter Rape, and varies in colour from bright red to purplish.

HEMP: This is a valuable seed, but it should certainly be given, during warm weather, with moderation, especially to caged birds; with birds in the aviary it is usually safe to keep separate hoppers of the various seeds and leave the birds to follow their own inclination. It is very fattening and stimulating, and with birds only enjoying a limited amount of exercise it should only be given freely when they are feeding young. Good seed is glossy and dry, and the kernels sweet and white. Do not accept seed which contains any quantity of pale green grains.

SUNFLOWER: Personally I prefer the white variety, though I am of the opinion that this counts for but little, providing that the seed is sweet and plump. Grosbeaks and many Finches are very fond of this, and for birds in the aviary it may be regularly given, but for caged birds discretion must be used, as it is oily and fattening.

The following seeds should only be used as occasional items of the *menu*. With caged birds you soon find out their tastes and they can then be used as *tit bits*, when they appear mopey or a little out of condition. As already stated, in the aviary nothing is wasted, and a handful of seeds not regularly having a place in the avian bill of fare is much appreciated by the birds. As such the following may be used with advantage.

LINSEED or FLAX: This also should be glossy, plump, and sweet; reject any which is dusty.

NIGA or INGA: Personally I do not recommend its use save very occasionally, and almost any seed, not actually poisonous, may be so used, that is, in small quantities at longish intervals. It enjoys so bad a reputation that I have never used it, even as an occasional item of the *menu* of my birds. A good sample should be shiny black in colour and free from dust.

TEAZLE, DANDELION and THISTLE: These are more in use for British birds than foreigners, nevertheless some of the Cardinals and Finches take fairly freely of them, and for such as will eat them, a small quantity occasionally makes a not unwholesome change. These seeds seldom come to hand in a thoroughly clean condition and should be well sifted before being served out to the birds.

MAW SEED: Many species that will not touch rape will eat a little maw seed, and it forms an agreeable change, an important item with seed-eaters, for it is none too easy to vary their *menu* to any great extent. A good sample should be of a bright blue colour.

SEED HEADS of Mignonette, Marigold, Lettuce, Oats and Indian Corn, should be grown by all the fortunate possessors of gardens, and in a half-ripe condition are very valuable for all species of foreign birds.

Personally, with all the species of the *Fringillidæ* I have kept, speaking at random, certainly more than 100 species, I do not know of an exclusive seed-eater, and in a state of nature, especially when feeding young, insects are more or less freely taken. Silverbills have been declared by more than one writer to be exclusive seed-eaters. I have both the African and Indian species and they come and contend with the Cardinals etc., for the mealworms when such are thrown down, and more, they usually manage to secure at least one each, *even if they take it from the beak of a larger bird.* The domesticated Canary also, very soon acquires a taste for the succulent mealworm, at any rate in the aviary. Buntings, Cardinals, and Weavers should have two or three mealworms daily, especially during the moult. Spiders also can usually be obtained, even by town and city folk, these should not be given too profusely, as though very beneficial to all and especially to ailing birds, they appear to have a purgative effect on most species, and the supply should be limited accordingly, nevertheless while they are to be obtained, two or three daily will form a wholesome addition to the birdy *menu.* Perhaps the best method of supplying insect food, especially to Waxbills, Firefinches, etc., is blighty foliage from any non-poisonous tree, shrub, or hedge-row herbage; their condition and glossy plumage will amply repay you for the trouble taken, and what healthful occupation it supplies to these minute but charming occupants of our cages and C. P. aviaries.

GREEN FOOD is an important item of the diet of all caged birds, and all the following may be used with advantage.

For Winter use, nothing surpasses lettuce, town and city dwellers can always obtain the tender cabbage lettuce, usually sold as French lettuce by most greengrocers ; or failing this, a little ripe apple is freely eaten by most species and wholesomely fills the gap ; as also do oats, wheat and Canary seed, sown in shallow pans and served to the birds when about two inches high.

During that portion of the year when it can be procured *sound* and free from frost, nothing surpasses tufts of grass, and any non-poisonous garden and hedge-row weeds; these are nearly always infested more or less with small bugs, lice and other insects, and certainly play an important part in the well-being of the birds. For such species as will not eat soft food, it is highly important, and such should have a fresh supply twice daily, as such green food plays an important part in the rearing of their young. When I was a keeper of British birds some years ago, I was very successful in breeding Bullfinches, this success was preceded by almost continuous failure till I adopted the practice of supplying the parent birds with an unlimited supply of chickweed, groundsel, and other weeds, fresh, two or three times a day.

Most species of the *Fringillidæ*, however, eat soft food freely when feeding young, and partially rear their young on this. As the suitable mixture has already been given at the commencement of this paper, nothing further is required here.

But before leaving this matter I would like to make my attitude quite clear on the vexed question of egg or no egg. Personally may attitude is, that it is neither necessary nor yet desirable, for the following reasons:—For cage birds I consider it too concentrated, stimulating, and fattening, and with the most vigilant care a fragment sooner or later gets left in some crevice, putrifies, and in that condition is little short of poison to the unfortunate bird that picks it up. Again, I'm a busy man, and under the necessity of giving my birds a supply each morning, so that it is always in cage or aviary 24 hours, even in the hottest weather; now whichever is used, sterilized or fresh egg once damped, in hot weather at any rate, putrification is very rapid, and in such a state it is positively a danger in the aviary. The small death rate (already mentioned) in my aviary amply demonstrates that it is not necessary, and the speed with which it putrifies *in conjunction with my small leisure*, also demonstrates *to me* that it is undesirable.

On one point, however, I do venture to be assertive, though I hope not dogmatic, and that is, that the soft food mixture, varied and modified for the different species as stated, will fully meet all requirements, and if sudden exigences call for such extremes, will keep fresh for 48 hours, even during the hottest weather we get in this country. I must emphasise in connection with these conditions, that the mixture *must not be wet*, but only slightly moistened, *i.e.* in the phraseology commonly used "crumbly moist."

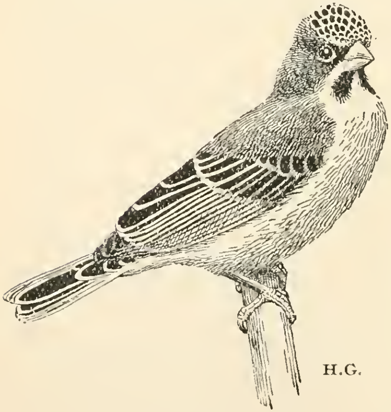
There are some species, that however freely they may eat of the soft food, etc., for their own sustenance, will only feed their young on live insects. Such fledgelings can only be reared at the cost of infinite labour on the part of the aviculturist, and success is almost hopeless if the birds form part of a mixed series; if they have a small enclosure to themselves, they must have a supply of live insects every two or three hours during daylight. To dwellers in rural districts, live ants' cocoons, spiders, beetles, cockroaches, smooth caterpillars, small worms and plant lice generally can usually be easily obtained, if the supply is regularly kept up, will suffice for the successful rearing of the brood, even town and city folk can secure some of them at the expense of a little extra labour and cash, and with the help of the almost always obtainable mealworm they should not always have to write failure after their efforts to assist such species to rear their young to maturity. In a mixed series the task is much more difficult, the supply must be given more frequently; a good method is to fix a small glazed pan to the nest box, and in this place the insects; as a rule the birds will see that their preserves are not poached upon, for when a small bird resolutely asserts itself in defence of its home and progeny, even much larger species refrain from open attacks. If I have been wearisome and unduly lengthy in the foregoing details, my desire to make them of practical use, even to the tyro, must be my excuse.

The concluding portion of the article I hope I shall be able to write for the next issue, so that it will be inclusive in the one volume, and will deal briefly with Parrots and Parrakeets—Fruit and Pollen-eating Birds and Parrots. Insectivorous Birds, and lastly Doves, Quails, etc.

(*To be continued*).

Editorial.

THE SCALY-HEADED WEAVER BIRD (*Sporopipes squamifrons*). The excellent figure accompanying these notes was drawn by Mr. Goodchild at the late L. C. B. A. Show, from Mrs. Leslie Miller's very fine specimen, aptly illustrating how beautiful a bird may be, when practically only a study in one colour. Mr. Goodchild has drawn the bird in a characteristic attitude with the feathers of the crown raised; the scaling however is equally distinct when the bird is in repose, and has



SCALY-HEADED FINCH.

From *Cage Birds*.
By courtesy of the Publisher.

a quaintly beautiful effect. It is well off for popular names, viz., Scaly-feathered Weaver Bird and Scaly-headed Finch, as well as the one at the head of these notes. It ranges freely over South Africa, being very numerous on the banks of the Orange River.

ADULT MALE: Forehead and crown, brown-black with each feather with a narrow whitish-brown margin; the entire upper surface of body, scapulars, lesser wing-coverts, sides of head and face, light brown; remaining wing-coverts, secondaries, and tail feathers, brown-black with whitish-brown margins; flights, brown with paler margins; cheeks, throat and under surface of body, white, washed with grey on the sides of the breast and flanks, and on the breast with fawn-colour; beak, pinkish; legs and feet, flesh-colour. Total length 4½ inches, tail 1¾.

ADULT FEMALE: Similar, but a little smaller and not quite so rich in colour. Total length 4 inches, tail 1½. From various writers, including Captain Shelley and Stark, we gather that they are very abundant on the banks of the Orange River, and congregate in small flocks, frequenting the bushes and mimosa trees that fringe the river banks. On the Limpopo River they are not so numerous, and build in June and July, whereas on the Orange River they build in March and April. While they perch freely, apparently the whole of their food (grass seeds and small insects) is obtained on the ground. Their disposition is active and vivacious, noisy, and when feeding keep up a constant quibbling with one another. They are as tame and fearless as *Passer domesticus*, frequenting the houses and kraals and feeding with the poultry, etc. The nest, an untidy looking domed structure, the entrance of which is concealed by projecting grass stems, is built in a bush, from three to ten feet above the ground; it is thickly lined internally with feathers or down. According to Stark the eggs are usually four or five in number, and vary both in shape and colour; the ground colour is pale greenish-blue and thickly marked with blotches and scrawls of brown and rufous.

A handsome cage or aviary bird.

BREEDING SWAINSON'S LORIKEETS: Miss Rosa Little writes me that after many failures she has succeeded in rearing a Swainson's Lorikeet. About two years ago there appeared a short article from her pen in *Bird Notes*, describing the parents of the young bird.

"The first egg was laid on January 13th, 1907, the second about the
" 15th, both were fertile but only one was reared, which is still doing well.
"They are now (December 7th, 1907), sitting again and I hope this time
"will hatch out two birds. I believe I am the first person who has bred
"any of these birds in England for the last 30 years."

I do not know of any such occurrence since the one recorded in *Notes on Cage Birds* (*second series*), and Miss Rosa Little is certainly to be congratulated on her success. I am sure it would be most interesting if she would write fuller details of the event.

BIRD FEROCITY: Mr. Stuart Dove, of Launceston, Tasmania, records in current issue of Nature Notes, the journal of the Selborne Society, an instance of bird ferocity, which occurred during a day's tramp in the bush which a friend and himself enjoyed.

"Late in the afternoon we were proceeding along a timbered ridge near the South Esk River, when our ears were assailed by the shrieking notes of a bird, which at first we took to be those of a garrulous Honey-eater, but louder and more continuous than usual. As the noise went on we scanned the horizontal limb of a gum-tree under which we were passing, and from which apparently the notes proceeded, but could see nothing. After listening a minute or two the sound seemed to come from near the foot of the tree, and my companion went over to a clump of fern which grew against the butt, and after glancing down called to me. I joined him, and this is what we saw: Two Grey Butcher-birds on the ground amid the bracken, locked in deadly conflict, and quite unable to rise; one was stretched on his back with the beak partly open, and was calling loudly for mercy; the other was lying upon him with the hooked point of the long, cruel beak driven in just behind the base of his shrieking brother's mandible, his left foot clasping the other's wing joint, while his right foot was clutching the cheek of the lower bird near the point where the beak was driven in. My friend raised them in his hands, and they could offer no resistance so firmly were they interlocked. While thus held I took a short stick and pushed back the point of the beak until the hook was clear of the bone in the head behind which it was driven, thus enabling it to be withdrawn. It was only after several attempts that this clearance was effected, and then the stick had to be employed to unclasp the talons from the wing-joint into which they were driven. So deadly was the grip of both claw and bill that there is no doubt both birds would have perished miserably had we not been fortunate enough to discover them in time. After separation they showed their gratitude by biting fiercely at my friend's fingers. On being liberated the first one immediately made towards the creek, to slake the burning thirst engendered by the heat of conflict; the other was carried some distance and then allowed to escape among the trees. Both were in splendid plumage, and probably this season's birds.

A somewhat similar instance was witnessed when we were on a caravan tour round the east coast of Tasmania several summers ago. While on the road near Gould's Country we were attracted by the novel spectacle of an animated ball of brown and greyish feathers by the way side. My friend stepped quietly up to the object and raised it in his hands, when it proved to be nothing less than a couple of hen Superb Warblers engaged in the stress of battle and squeaking so fiercely that we were neither seen nor heard until they lay in our hands.* They were allowed to fly after giving them time to cool down, and when they left, were no doubt, sadder and wiser birds!"

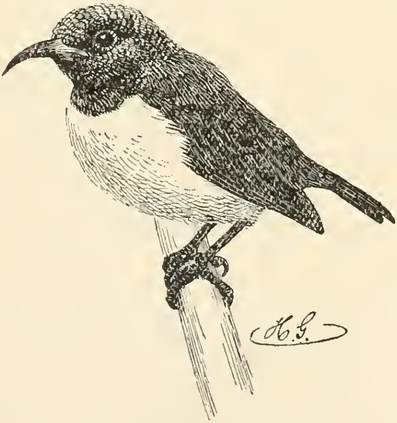
* The same thing occurs with many English species, particularly among the Buntings. Chaffinches, cock and hen, fight so fiercely when pairing that I have on more than one occasion picked them up locked tightly together, and when released have immediately renewed the combat; but once the hen is mastered all this ceases; of course quite a different occurrence to that witnessed by Mr. Dove and his friend. However, such circumstances are not unique among our native birds.

JAVA SPARROW + SILVERBILL HYBRID: Miss Drummond of Errol, N.B. sends me a few notes of the rearing of the above Hybrid in her aviary. It will doubtless interest many of our members; it certainly must be numbered among the unlikely cases of hybridisation, the difference as to size, etc., being much more striking than in the Hybrid Mannikin for instance, reared in my aviary last year.

"Probably the account of a Grey Java Sparrow x Silverbill Hybrid
"may interest some of the members. Three were hatched last February,
"but only one was reared, it is a male and a very fine bird, with the body
"colouring of the Silverbill. In size it is fully as large as the Java, but is
"slimmer, the beak is pinkish, there is a broad black patch on the cheeks
"and another on the throat; the tail is black. The Hybrid is now nesting
"with an ugly little Spice Finch, the two form a great contrast, and I hope
"there may be some result from this double cross. They have built a

"spherical nest, with a hole in front, in a high warm corner of the inner "portion of the aviary, choosing a gorse bush as the site. A second "attempt by the Java and Silverbill has ended in the death of the latter "only two days ago (viz., Jan. 5th, 1908). The Java is now mingling with "his own kind, whom he had deserted for over a year."

A very interesting record and I believe the first occasion on which a hybrid between these two species has been reared. From the description given it must be a handsome bird. I fear however there is little prospect of any result from the double cross. Another feature is the early period of the year (Feb. 1907) the hybrid was hatched. I have come across several experiences of my own and others recently in which young have been hatched and reared during this period of the year. This past year for instance I know of more than one case in which the principal breeding results were crowded into February and March.



INDIAN SUNBIRD.
From *Cage Birds*.
By courtesy of the Publisher.

INDIAN SUN-BIRDS: This lovely little bird is not so easy to keep as many other members of the family NECTARINIDÆ, but by the aid of pure honey and milk sop containing either Mellins' Food or Scott's Emulsion it should not present any insuperable difficulty providing it is secure from draught, combined with plenty of light and fresh air. Well sweetened stewed fruit will also help to vary its diet; blighty syrays of foliage from some non-poisonous plant should also be supplied and also during the summer freshly gathered flowers for them to extract the nectar therefrom.

Unfortunately I omitted to take any detailed notes of the plumage of Mr. Maxwell's beautiful specimen, whose metallic plumage is quite typical of this gorgeously arrayed family. Here are a few notes gathered somewhat haphazard from Jerdon's "Birds of India." Speaking of *Leptocoma zeylonica* he says: It may be seen in every garden flitting from flower to flower, it builds a neat nest of grass, vegetable fibres, Spider's web sometimes, with a hole at the side near the top, overshadowed by a canopy of the same materials; the eggs are usually two in number and of a pale greenish colour with small dusky spots. It feeds on the honey of flowers and the small insects which infest them. Speaking of *A. asiatica* he states it feeds partly on the nectar of flowers, but a good deal on insects, small cicadellæ, flies, spiders, &c.

From Jerdon's notes of the various species it is very clear that flies, and especially spiders with other minute insect life forms a large portion of their dietary, and I am rather inclined to doubt if honey alone would insure them a very lengthy life. Jerdon quoting Blyth states that many are taken at Calcutta by bird-lime for sale, and that they can be kept alive for many days on sugar and water, honey or fruit jam.

Foreign Birds at the L.C.B.A. Show.

One of the best collections of foreign birds seen on the show bench of recent years was gathered together at the Horticultural Hall on December 6th and 7th ult. As the writer judged, no critique will be attempted, also as the matter is now almost ancient history, only a record of results will be given for reference, with a brief concluding notice of the rarer and more uncommon exhibits. The liberal classification provided resulted in a large varied entry, viz., 127.

BUDGERIGARS, A. S. OF LOVEBIRDS AND HANGING PARRAKEETS (5): 1, Mrs K. L. Miller, Blue-winged Lovebirds; 2, Mrs. C. Cooper, Yellow Budgerigars, very tight and of good colour; 3, 4, F. Howe, nice pair of Yellow Budgerigars. The most noteworthy exhibit in this class, a nice pair of rare Guiana Lovebirds, was unfortunately robbed of its award (first), by an unfortunate clerical error on the judge's part. The award was given to the Guiana Lovebirds, but was unfortunately placed opposite No. 1 instead of opposite No. 2 on his slip. When the error was discovered the owner of No. 1 was quite willing to forego the prize, but the L.C B.A. officials, ultimately and rightly, upheld the rule "that judge's slips must not be altered after being handed in."

PARRAKEETS, LORIES, LORIKEETS, etc. (16): A fine, varied, and interesting array, the gorgeous plumage of many of the exhibits being quite a feature of the section. 1, W. Cook, rare Black-crowned Lory, will be a glorious bird indeed when it has passed through another moult; 2, H. E. Cooper, the well-known pair of Red-vented Blue Bonnets, in fine condition; 3, C. Cooper, Barnard Parrakeets, an attractive pair; 4, G. W. Leavers, nice Senegal Parrot; ex. 4, K. L. Miller, good pair Many-coloured Parrakeets; vhc, Conway-Gordon, good Ceram or Chattering Lory; hc, Frostick, Alexandrine Parrakeet, good colour, very sleek and tight; c, T. Miller, K. L. Miller, Cooper, Dewhurst, Brammer; also exhibited very fine Chattering Lory, a well-known winner, not yet through the moult, and a pair of uncommon Crimson Lories, which were puffy when the judging took place.

PARROTS, COCKATOOS, MACAWS, etc. (8): 1, Mrs K. Leslie Miller, silver medal, rare and unique Dusky (or Violet) Parrot, in very finest condition, a most interesting and chastely coloured exhibit; 2, J. Tyson. very nice Grey, quite an accomplished linguist; 3, C. Cooper, very good Blue and Yellow Macaw; 4, W. Salisbury, nice Grey, also a good talker; c, Mrs Summer; also exhibited Moluccan Cockatoo, attracting much attention by its varied and fluent utterances.

THE COMMON WAXBILLS, WEAVERS, etc. (12 : 1, F. Howe, St. Helena Waxbills, quite the finest we remember to have seen; 2, Mrs.Warren Vernon, silver medal, Zebra Waxbills, good colour, very tight; 3, Meadows, good pair Green Avadavats; 4, Maxwell, very good Rhodesian Ribbon Finches, larger than the common species; vhc, Mrs Cooper; hc, Townsend, Hodgson; c, Howe, Hodgson, and Partridge.

Again an apt illustration of what a beautiful series may be kept, without going outside the cheap and freely imported species.

A.O. SPECIES OF WAXBILLS, MANNIKINS, etc. (12): 1, F. Howe, Violet-eared Waxbills, very rich in colour, sleek and tight, quite one of the best we have seen; 2, 3, Mrs K. L. Miller, Sydney Waxbill, a beautiful, softly coloured bird and Melba Finch, a nice bird, but not quite so bright as some we have seen; 4, S. M. Townsend, good pair of the prettily-marked Rufous-backed Mannikin; vhc, M. B. Partridge, White Java Sparrows, very pure and tight; hc, Mrs K. L. Miller; c, Maxwell, Shiers, and Cooper.

GRASSFINCHES, WEAVERS, etc. (12); 1, Mrs K. L. Miller, Scaly-crowned Weaver bird, an uncommon exhibit (which however bids fair to become rather common) in perfect condition, a pretty, quietly clad bird, in a pleasing array of browns, the feathers of the fore crown being black, edged with brown, standing out very distinctly, and from which the bird takes its name "Scaly-crowned"; 2, 3, Mrs Warren Vernou, nice pairs of Diamond Finches and Queen Whydahs, in the order named; 4, vhc, Maxwell, Queen Whydah, just beginning to show signs of going out of colour; hc, Mrs K. L. Miller; c, S. M. Townsend, F. Howe and Hodgson.

GROSBEAKS, TRUE FINCHES, BUNTINGS, CARDINALS, etc. (12): A most interesting class, containing several rare and uncommon exhibits, of which I believe the Lavender-backed Finch and Black-faced Serin to be new to the show bench this season: 1, Maxwell, Lavender-backed Finch, very tight in feather and of good colour. This diminutive Finch is a handsome little fellow and a fair songster; 2, Mrs Galloway, Black-faced Serin, a lovely bird in very finest condition, its plumage being a pleasing arrangement of Canary yellow, greens and blackish; 3, Mrs Cooper, Black-headed Siskin, an uncommon exhibit; 4, S. M. Townshend, nice Quail Finch; vhc, Maxwell, Sepoy Finch, an uncommon exhibit, the natural colour of the cock is a fiery geranium red, but in captivity they moult into orange-yellow: hc, E. W. Harper, Mrs. K. L. Miller, S. M. Townsend; c, W. Cook, nice Nonpareil Bunting and Indigo Buntings out of colour.

TANAGERS (16): A new departure and worth a long journey to see; for gorgeous and irridescent plumage the Tanagers are almost unsurpassed. The Superbs alone—quite apart from the rarer species—were a feast of beauty. Mr Dewhurst's specimen being very rich in colour (colour-fed). The Festive Tanager, a lovely bird of rich, grass green var. with black on the upper surface, top of head, rich, blue and sides of face, golden-chestnut; a first appearance on the show bench; 1, 2, 4, Maxwell, Festive, Black-backed, and Maroon Tanagers, in the order named, a grand team; 3, equal 4, S. M. Townsend, silver medal, with superb specimens of Magpie and White-capped Tanagers; vhc, Miller and Millsum; hc, Mrs Warren Vernon and Townsend; c, Dewhurst and Shepherd, each with very fine specimens of Superb and Scarlet Tanagers. Too great praise cannot be bestowed on every exhibit in this class, and judging them was a thankless and difficult task indeed.

SUGAR BIRDS, HONEY-EATERS, etc. (6): A small class, but of rare beauty, two of them, the Indian Sun Bird and Black-faced Sugar Bird being decidedly rare; 1, Maxwell, Indian Sun Bird, a smallish bird of great beauty, the whitish undersurface lighting up to the irridescent plumage of the upper surface, a unique and beautiful exhibit; 2, Townsend, Black-faced Sugar Bird, an equally beautiful and rare exhibit, sleek and tight in plumage, one of the largest of the Sugar birds, it certainly is not the least beautiful of this exquisite family; 3, T. Miller, very fine Gold-fronted Green Bulbul; 4, vhc, Townsend, good pair of quaint Japanese Lestnops, and a Green Bulbul.

A. O. SPECIES not included in above classes (13): The feature of this class was of course the King Bird of Paradise—not the specimen which has been winning in the provinces—an exhibit of rare beauty, in very fine condition and well shown. Its glowing plumage cannot be described, neither could same be appreciated in the limits of an exhibition cage; 1, C. T. Maxwell King Bird of Paradise, a grand exhibit, without a flaw; 2, De Von, immature Bower Bird; very rare and attractive; 3, Millsum, Black-throated Chinese

Laughing Thrush, an uncommon exhibit, in very fine condition; a bold handsome fellow: 4, Mrs Warren Vernon, Bronze-headed Troupial, a beautiful exhibit, very tight and silken; vhc, Townsend, Mrs Warren Vernon, and Bromwich; hc, Miss Shepherd; c, Miss Shepherd and Withers Bros. HYBRID: Cancelled, only one entry.

MEMBERS' CLASSES.

SEED-EATERS (5): 1, Mrs Cooper; 2, Mrs Warren Vernon; 3, Payne; hc, Dewhurst.

INSECTIVOROUS (7): 1, vhc, Dewhurst; 2, c, Mrs Vernon; 3, Cook; hc, Howe.

The following were mostly, I believe, exhibited for the first time:—

Guiana Love Birds ..	Owner,	Mr O. Millsum
Violet or Dusky Parrot ...	,,	Mrs Leslie Miller
Black-capped Lory ...	.,	Mr W. Cook
Lavender-backed Finch ...	,,	Mr C. T. Maxwell
*Black-faced Serin ...	,,	Mr E. Galloway
Festive Tanager ...	,,	Mr C. T. Maxwell
†Indian Sun Bird ...	,,	Mr C. T. Maxwell
Black-faced Sugar Bird ..	,,	Mr S. M. Townsend
*King Bird of Paradise ...	,,	Mr C. T. Maxwell
Black-throated Laughing Thrush	,,	Mr O. Millsum

* Has appeared previously in the provinces.

† Doubtful, several species have been previously exhibited.

The Club Medals for "Best Birds" in classes for:

Love Bird, Parrakeet and Parrot	MRS. K. LESLIE MILLER.
Waxbill, Weaver and Finch Classes	MRS. WARREN VERNON.
Tanager, Sugar Bird and A. O. Species ...	MR. S. M. TOWNSEND.

Correspondence.

AVIARY NOTES FROM BALLYWALTER PARK.

SIR,—In reply to your enquiry, I am sorry to say this year has been a failure as regards nesting, for which I think the abnormally wet and cold season has been mainly responsible.

Most of the birds, including Canaries, Cutthroats, Bullfinches, Cordon Bleus, Gold-breasted and Orange-cheeked Waxbills, and Cardinals, built nests, and laid full clutches, but they came to nothing. In some cases they hatched out, but the chicks were all drowned or perished with the cold.

The general health of the established birds has been good and there have been very few losses, in spite of the unfavourable weather conditions. They are all in my outdoor aviary and are looking very well and fit.

The Californian Quails which have nested with me every year, have made no attempt to do so this year. The Nicobar Pigeons, which were in my possession four or five years before they nested, have laid several eggs but have not hatched out. The young Nicobar which was hatched in July, 1905, has not yet come into mature plumage, it is much more of a red-bronze hue and not nearly so green as that of the adult birds, and the white tail is still lacking. The nest is simply a few sticks laid together, either in a rockery or the ground, or on the top of a stump

Cockatiels which usually do well with me, have laid dozens of eggs, but have not hatched out a single chick.

I fear in very many aviaries results have been small this year. (Lady) N. L. F. DUNLEATH.

A SCARLET TANAGER'S ESCAPADE.

SIR,—I have received the following in a letter from my friend, Dr. Walker, which I think will be of interest to the readers of "Bird Notes."

"And now I am going to tell you of the romance of a Scarlet Tanager, which you can take if you like as a high testimonial to the stamina of the bird you sold me earlier in the year. Whilst I was from home in the end of September, Sheffield had its first week of fogs for the present season. If you have not felt one similar you cannot guess what it tastes like. It came unusually early and unexpected. My maid who looks after the birds in my absences did her best, but unfortunately a Pekin Robin (female) first succumbed. That was the one which nested earlier in the year. A green female Budgerigar went same road, and the morning before our return, when the maid opened the shutters between the closed and open parts of the outside aviary out fluttered the Scarlet Tanager, who was always first in the morning, and fell on the ground apparently dead. The maid picked it up, took it out and laid it (seemingly lifeless) on the table of the summer house. When she went to look at it again it was gone and she fancied a cat must have taken it.

More than a week later I heard that a Scarlet foreign bird had come to live on ——— estate, more than a mile from here, and was to be seen three or more times a day among the plum and other fruit trees. Next day I heard its call and had the pleasure, after answering its call, to see my Scarlet Tanager flying about wild, evidently in the enjoyment of grand health and spirits in spite of most inclement weather. It was worth the price of the bird to see it living wild and in such magnificent form and plumage. But I meant to keep him in the grounds if possible and I learned that he was mostly to be heard either there or in ——— next door. I knew his favourite tit-bit was a wasp grub so these were supplied on a likely spot at the same time each day to insure his visits when fruit became scarce; the gardener and myself set about devising means for his recapture. He is again safely lodged in my aviary in splendid form, though he did look glum as I brought him home in a little cage and seemed to say "Done again." But just imagine a bird like that on the loose in the month of October for upwards of a fortnight in such weather as we then had and not a scrap the worse, but if possible really seeming better. I don't mind how many more of the same sort I can get. A few of them about a fruit garden must be a lovely spectacle. I find that next to wasp grubs and mealworms he loves a pear better than bananas or oranges."

When we realise the fact that this bird lived in cold, wet, foggy weather all on its own for 14 days and was not fed, a few wasp grubs being all that was used to entice it to the spot daily, and the lovely condition when captured, we can but say that this is yet another instance of the hardy and robust character of many species of Tanagers, which really do better outdoors than in the birdroom. The bird mentioned above was moulted outdoors in my open aviary. O. MILLSUM.

Post Mortem Reports.

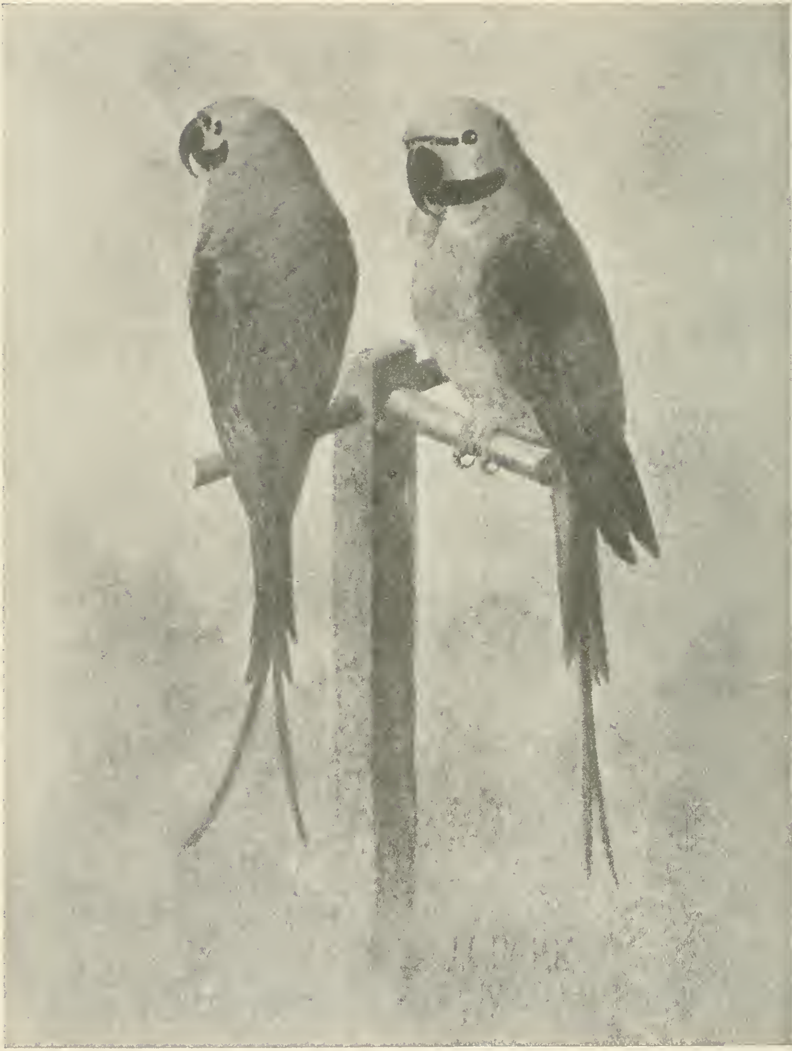
(*Vide Rules*).

ROCK ROSA PARRAKEET. (M. A. McWilliam). Cause of death, Septicæmia. In your letter you stated "hen." However, I found it to be a male.

JAVA SPARROW. (Lady Ellen Dunn). Cause of death, Septicæmia.

SUPERB TANAGER. (W. H. Foster). Cause of death, Septicæmia.

HEN SENGAL PARRAKEET. (James T. Porteous). Double pneumonia, modular disease of the liver indicating Septic Fever.



MOUSTACHE PARRAKEETS.

Photo by E. O. PAGE, *from a water colour drawing by* J. C. PARK, *from living specimens in the collection of* F. SOMERS, ESQ.

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BIRD NOTES:

THE JOURNAL OF

THE FOREIGN BIRD CLUB.

The Moustache Parrakeet.

Palæornis javanicus-lathami.

By Wesley T. Page, F.Z.S.

The plate accompanying these notes is a photograph from a drawing from life, by Mr. J. C. Park, of birds owned by our esteemed member, Mr. F. Somers, M.R.C.V.S., and which are evidently in finest possible condition, having been winners at several Northern Shows. This species has quite a number of vulgar names, viz.: Javan, Banded, Whiskered, and Red-breasted Parrakeet, as well as the title at head of these notes, while it is almost as well off for scientific synonyms, the species being *alexandri, fasciatus, pondicerianus, osbeckii, mistaceus,* while it has been in turn relegated by various writers to the genera *psittacus* and *Palæornis ;* its German designation being *Der alexandersittich von Java.*

Several species and local races are known as the Moustache Parrakeet, and the opinion of Parrot lovers is very variable as to its attractive qualities or otherwise. Canon Dutton, who has possessed two specimens considers them very unattractive, though tame and gentle, and not so noisy as the Bengal Parrakeet. Bechstein testifies to its being a fine talker, which others have endorsed, while fully as many find it dull, stupid and unattractive ; amply illustrating the amount of individualism there is among Parrots of every species. Personally I am of the opinion that almost every species will talk a little, if pains be taken with them, though *javanicus* is not so teachable as *torquatus.* Nevertheless, when in condition it is a fine and handsome species and not difficult to keep in health. A staple mixture of canary, hemp, millet, and oats; with a piece of biscuit (dry), ripe fruit, a few nuts, cuttlefish, and, of course, water, will keep this species looking very fit and well; while slops, messes, and table scraps will soon make it look a miserable and disreputable creature.

DESCRIPTION: Upper half of body, darkish grass green; head and cheeks, yellowish-grey; nape and back of neck, brighter green; throat and breast, vinous red; remainder of under surface, yellowish green; underside of tail, yellow; a broad, black moustachial streak adorns the lower part of the face, while a narrower black streak extends from the upper mandible to the eye and from the eye to the nape; the beak is red; legs and feet greyish-pink. A similar species or race has the whole of the under surface yellowish-green.

As there is so little difference between the Javan Parrakeet and its Indian congener, I have placed both the specific names at head of these notes. They certainly are not as noisy as some of their more talkative cousins, but they are docile, gentle, and handsome in appearance.

So far they have not been bred in captivity in this country, but there appears to be no reason why they should not do so, providing a fairly spacious aviary could be given up to them. Under such conditions when climbing and flying about, this species and many others make a fine spectacle indeed. In most towns and cities we have neighbours to consider, who are not aviculturists, and have neither sympathy nor patience with our *lunacy*, and so with us *Platycerci* has the greater opportunities to distinguishing itself in reproducing its kind, while *Palœornis* is more or less neglected. There is an opportunity for our country members at least to earn a certificate by breeding this species.

Nesting Notes for 1907.

By R. Suggitt.

I think everyone will agree with me that the past summer has been an exceptionally discouraging one for aviculturists who keep their birds in the open. The loss of many a promising nest of youngsters is undoubtedly attributable to the continuous cold weather and heavy rains. My record however is not altogether one of failure; I had one or two successes, but they were in no way out of the ordinary.

A pair of Yellow Sparrows (*Passer luteus*) reared four broods of two, four, two and three respectively, all of which reached maturity.

This was really an achievement for a single pair of birds. The Yellow Sparrow is worthy of inclusion in every mixed collection of birds.

These birds are most prolific breeders, but of course they will not rear young without a liberal supply of live food. Given a fair opportunity they will have at least four broods during the summer. Four eggs is the normal clutch.

Three young Spice Finches left their nest on August 25th, and when I disposed of them in January, 1908, they had almost got their adult plumage. The female parent was aviary bred.

Cutthroats and Silverbills reared as usual a fair number of young, but as Cutthroats invariably, and Silverbills usually, choose for a nesting site a cocoa-nut husk or Hartz cage under cover, heavy rain or cool weather does not materially affect them. In the summer of 1905, a pair of Indian Silverbills built a nest in a rather thin hedge and reared a fine brood of four young ones, but this is the only case in my experience in which a Silverbill's nest has been made in such a situation.

A pair of Aurora Finches built no fewer than seven nests during the spring and summer. I discovered the first one in a cigar nest-box, about the middle of March, when they must have been sitting a considerable time as the contents of the eggs were dried up. When I took the eggs away another nest was immediately started upon.

Young birds were hatched on the second, and all the succeeding attempts, but although I did everything possible to assist the parents to rear them I was always disappointed. One clutch reached the age of fifteen days before they died, and they had scarcely commenced to feather. At this age the young Aurora Finch has a dark brown skin, grey nesting down, black beak, and a bright blue gape line.

A solitary young Common Avadavat came out of a rain-sodden nest, before it was fully fledged. I found the poor little mite shivering at the bottom of the bushes, and replaced it in the nest several times, but all to no purpose. It was dead the next morning.

This was the last chance of success with the Avadavats, my three hens shortly afterwards being murdered by a Spotted Firefinch.

A pair of Cordon-Bleus succeeded in hatching their eggs twice, but in both cases the young ones died before they were able to leave the nest.

Green Avadavats, Orange-breasts and St. Helena Waxbills built several nests, but nothing ever left them except the old birds.

Both the Common Waxbill and the Orange-cheek sometimes make their nests on the ground, well concealed among the long grass, and a male of the former and a female of the latter mated, and built several such nests. In one case young were hatched, but they shared the common fate of the other young Waxbills.

I may say here that a Waxbill of any kind has never been reared in my aviary.

A cock Red-backed Bunting (*Emberiza rutila*) mated with a hen Lapland Bunting. She built a neat nest amongst some hay, under a clump of ivy. Her first egg was broken, and for the second I substituted that of a Greenfinch, but she never laid again, and two or three mornings later I found her dead. The eggs were very small for the size of the bird and resembled those of a Skylark, but with much warmer brown markings.

In March a cock Nonpariel Bunting chose for a mate a small hen Canary. She laid several clutches of eggs, but all were infertile, afterwards the Nonpariel was jilted for a Siskin, but no young hybrids were reared.

A pair of Red-headed Finches, which I obtained early in October, laid several eggs in various places but they never seemed to be in earnest, and did not attempt to hatch any of them.

The hen of a pair of American Thrushes, (probably *Turdus murinus*) built a nest on the top of a Hartz Cage, and laid two eggs; but as I never saw the cock take the slightest interest in the proceeding, the eggs were, as I expected, infertile. I intend to give an account of these birds shortly.

It is particularly disappointing to find, after the winter is over, a quantity of odd unpaired birds on hand; misfortunes and accidents seem to occur more frequently in the winter. I need not give more than two typical instances. During one of the very severe frosts in January, 1907, a particularly fine cock Rufous-tail Grassfinch had his feet so badly frozen, that afterwards his toes came off and, as he could not perch, I was obliged to kill him. One morning I found a hen Pileated Finch, which I am almost certain would have nested during the next summer, on the floor of the aviary, scalped and dying; no doubt a prowling cat was the cause.

Cats, I am prepared to admit, are very useful animals, so long as they confine their attentions to mice, but I strongly object to their sitting on the top of the aviary at night, watching the birds dash wildly from side to side. I have my own method of dealing with them, a method which once employed, distinctly discourages a second visit.

Feeding and Acclimatising Foreign Birds.

By Wesley T. Page, F.Z.S.

(Continued from page 310.)

PARROTS & PARRAKEETS.

Grey Parrots, Amazons, Cockatoos, Macaws, and the larger Parrakeets (so-called) do well on a mixture of wheat, canary seed, hemp, sunflower, oats and dari, in the proportion of one part each of hemp and sunflower and two parts each of the others. Ripe fruit should be given daily, and the following can be given at intervals to vary the diet: Nuts (shelled walnuts are as good as any, and also economical owing to all being eaten, consequently there is no waste, as is the case with most kinds), plain biscuits (dry). Green food, and a little raw carrot or boiled potato (dry) should give an ample range and also supply a varied and wholesome *menu* for the above groups.

Amazons, Cockatoos, and Macaws will be the better for maize being added to the seed mixture, and also for a little boiled maize once or twice a week, especially with an ailing bird or one in poor condition; however, care must be exercised in its use, as it soon turns sour, and a careful watch must be kept that stray particles are not left about, or trouble will follow if such are eaten.

The other genera *Platycerci*, etc., will thrive on a simple mixture of canary, millet, hemp and oats, one part hemp to three parts of the other kinds. A larger portion of hemp can be given with advantage during the winter months to birds confined in outdoor aviaries. Nothing more will be required, save fruit and green food. The above dietary I have always found ample for the rearing of young birds to maturity, but during the breeding season the supply of green food must be ample and *fresh*. During the moult I always throw the Broadtails and other Grass Parrakeets a few mealworms, and at other times a few occasionally are rather a help than otherwise ; that is, for those enjoying the semi-liberty of an outdoor aviary.

The genus *Brotogerys* are best kept on a plain diet of canary seed, of course with green food and such fruit as they will eat. Hemp should only be given in strictly limited quantity and mostly during the cold season, or with caged specimens fits will be the result.

* * *

FRUIT AND POLLEN EATING BIRDS AND PARROTS.

The Parrots under this heading are those known as Lories, Lorikeets, and the Hanging Parrots or Parrotlets. Many species of Lorikeets are fond of canary seed and such should be provided along with the principal item of the *menu* for this group ; viz., milk-sop. As regards the sop, my method of preparation has alraedy been described ; but I must state here that for the Lories it requires to be very sloppy, and I found it very beneficial to put a teaspoonful of either Mellin's Food or Scott's Emulsion into each bird's supply, giving even a larger proportion to new purchases coming to hand in a thin or apparently debilitated condition.

Well sweetened stewed fruit is also a wholesome item of the *menu* for this group. Dates and dried figs are readily eaten by many species, and the latter may be stewed and mashed.

With this group of Parrots, even with Swainson's, I always try and induce them to take milk sop, though the latter species will exist for a good period on canary seed alone ; at the same time my experience teaches me that they are the better, and longer-lived, for a little milk-sop. It will be as well to remark here, that for fruit or pollen-eating birds or Parrots kept in cages in rooms, the cage should stand in a tray much larger than the cage, as the excreta is mostly ejected outside the cage.

For such species as Honey Suckers, Sugar Birds, etc.,—that is all other species than the Lories and Lorikeets ; the diet already mentioned should be given. Personally I am no advocate of the honey diet, and if such be offered I certainly advocate it being given frequently and in narrow mouthed vessels or tubes, also that a small quantity of meat extract be mingled with it. The milk sop, stewed fruit (rather liquid and well sweetened), an occasional mealworm and some insectile mixture somewhat as follows: dried flies, ants' cocoons, and sponge cake, moistened with mashed banana or a little milk. This is rather "messy" preparing, and for those not caring for the bother, the insectile food named in the opening chapter will answer the purpose, but half its bulk should be crumbled sponge cake.

Boiled rice (sweetened) is also given to the Lories and Lorikeets and may be used as a change with advantage.

Nearly all this group resent a sudden change of diet, and when purchasing it is highly important to ascertain how they have been fed, and however unwholesome this may appear to be, it must be supplied at first, the bird being gradually brought on to a more wholesome diet; for the want of the above precaution many good specimens are sacrificed.

The majority of Tanagers are best kept on the ordinary insectile mixture, containing a liberal proportion of sponge cage, an unlimited supply of such fruit as they individually favour; or "ring the changes" on apple, pear, orange, banana, pomegranate, etc. Milk sop is not essential for them, in fact many of the *Calliste* and *Tanagra* will not eat it. Most species will take, and are the better for two or three mealworms daily. Banana meal, and also crushed puppy biscuit are useful ingredients of the insectile mixture for this group.

In conclusion, I would emphasise my earlier remarks as to Mellin's Food or Scott's Emulsion; the judicious use of same will save the lives of many valuable and beautiful birds.

* * *

INSECTIVOROUS BIRDS.

Practically the whole ground has been already covered, that it simply remains here to mention some of the available foods.

Nearly all this group will eat ripe fruit, and it is certainly wholesome for them, especially, as many species will not eat green food, not even when minced. Their need may be briefly summed up—live insects and some good insectile mixture. As regards live insects, the mealworm will be the main-stay for most town and city folk; another valuable insect is the cockroach, popularly known as the black-beetle, and those whose kitchens are blessed (?) with these creatures, have an almost unstinted supply of live insects cheaply to hand, Those also with gardens and rural hedge-rows close at hand have an almost unlimited supply of food for the trouble of trapping. But for those who lack these sources of supply, their dependence must be on the expensive mealworm. The "abuse of the mealworm" has become almost a proverb, which personally I don't believe in at all; both for birds in the cage and aviary I have used them *ad. lib.* and never found any ill effects therefrom. Of course a bird getting only a limited amount of exercise must be dieted with care, and on the first sign of becoming lazy and overfat, means must be taken to reduce this, by a regulation of its diet, the use of a mild aperient, and say a fly round the room once or twice daily.

Gentles also make an agreeable change of insect food, and can usually be obtained during the greater part of the year. They should be well scoured in sand before supplying to the birds.

Wasp Grubs are much appreciated by all species of Finches, Buntings, etc.; do not trouble to pick them out, hang up a piece of the comb and leave the birds to help themselves.

A saucer of ants' cocoons as bought, is visited by many species, especially when feeding young.

The observant aviculturist will soon learn the happy medium—for conditions must vary, at any rate slightly, according to the housing of the birds—and not kill the occupants of his cages, etc., by kindness.

The following will be found useful items for an insectile mixture.

Powdered Puppy Biscuit
Chicken Meal
Game Meal
Partridge Meal
} Either form a good basis for the mixture.

Dried Flies (a good sample should contain but little dust and the small bugs be mostly in a whole condition).

Ants' Cocoons (some of the cheaper samples are no use at all, one might just as profitably purchase chips; procure the best and accept only such as are free from rubbish).

Dried Pupæ. This when ground (Pupæ Meal[*]) is a valuable item of any insectile mixture; its worst feature is its smell for it is most decidedly nosey. The above is the dried and powdered pupæ of the Silkworm moth—a waste product of the silk industry. I incline to the opinion that it is most useful and more appreciated by the birds when ground to flour and I find it mostly requires re-grinding for use. My predecessor gave the address (Vol. IV. *B. N.*) of Messrs. Grilli Bros., *via* Ghibellina, Florence, Italy, from whom it may be obtained direct, about 10 lbs. costing 4/7, post free. It may also be obtained from Messrs. Trower, who supply it fine ground. As regards mixing and quantities, see opening chapter, "How I feed my Birds."

* * *

DOVES.

Most of the Australian smaller species thrive on a staple diet of canary and millet, with a regular supply of fresh green food; but the wants of most species will be covered by the following mixture: canary, millet, wheat, dari, crushed oats, paddy rice, tares, rape and hemp seed. The fruit eating species must have ripe fruit *ad. lib.* Banana Meal is very wholesome for this group. All species of Doves are benefited by Nut Meal ; the popular monkey nut (so-called) as well as Hazel, etc., rather coarsely ground is a very wholesome addition to their diet, and I have formed the opinion that it improves the condition of their plumage, from the fact that since the wrinkle was given to me, the plumage of my birds increased in sleekness and lustre.

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[*] Sometimes advertised as Locust Meal.

* * *

QUAILS, ETC.

I do not propose dealing with this group as a whole, but as so many of the smaller species make such an agreeable variety in the garden aviary and are so easily kept, for this article to be really complete some small mention must be made of same. The Common, Chinese or Painted, Harlequin and similar species are charming ground birds and a pair of one or the other ought to occupy each outdoor enclosure. The seed mixtures given under the heading of Doves, will fully meet their needs, with a few live insects occasionally, when they are feeding young, insectile food, ants' cocoons (living if possible), and minute insects, any small plant bugs—such as green fly, etc.—will suffice for the successful rearing of the young.

Finally, the above has been written against time, and under great pressure to meet an expressed want, and I trust whatever its shortcomings, that it may serve its purpose.

Reminiscences of Bird Collecting and a Shopping Visit to Calcutta Dealers.

By Captain G. A. Perreau.

(Continued from page 279).

The thing that fetched me, even me, intent only on seed-eaters, was the number and variety of fruit- and insect-eaters. There were some of the insectivora in the morning, and during the time I lived in Calcutta, I had always seen a good number and variety, but this was something quite different. I found they were being collected for some large English dealer. When next in England I hope to visit the dealer I think it was, and perhaps he will let me know if I am right, and also if I am correct in fancying that he did not get much profit out of that lot. I followed the advertisements in the bird papers pretty carefully for an expected influx of rare Australian (a bit later) and Indian birds; the former I found, but, bar a sudden drop in the price of Pekin Robins, there was no trace of the latter. There were cages and cages of this bird, all very crowded and looking very well and happy. I fell to two pairs at a rather higher price than that for which they were procurable at home some two months later, not very ruinous. I also fell to two pairs of Blue-winged Sivas, of which there were a few in a large cage, and to four Zosterops: why I took these I don't know, except that I am fond of them and thought I would like to have them in camp. Neither survived long. I also nearly succumbed to Niltavas and Fruitsuckers. Shamas, Dyals, and such like gave me no temptation, and the larger Thrushes and Jays did not interest me, at any rate as far as regards buying, though the Peko (at a stiffish price), White-crested Laughing Thrushes, Black-headed Sibias, Silver-eared Mesias, Black-throated and other Jays commanded attention. There were many other sorts which I do not remember as I did not identify them at the time, as, to me, just then they were just a Thrush or a Jay as the case might be. I know there were a few Pittas and crates and crates of the Black Hill Mynah were brought in while I was there.

These crates are round shallow baskets with a large round hole left in the top, such as fowls are carried about in out here, only a bit smaller. The hole is closed with netting through which their food is thrown in, goodness only knows how they are watered. There were quite thirty Mynahs in a crate, and one coolie would bring in four or five crates, one on top of the other, on his head. At least six coolies came in while I was there, but this was probably the lot, and I fancy such consignments do not often come in. Out of the six hundred (at the lowest) I should say that quite one hundred were put in the dead heaps, lying near the two shops who received them, and that quite another hundred were put into separate cages (say twenty to a cage) as being sick, very sick. I wonder how many survived a couple of months. These were mostly young birds and I could have had my pick and taken a dozen at a very low price, but was not so inclined. The crate may also be used for other birds but I saw none brought in. I must say, too, that they were attended to at once and that all the birds in the bazaar looked fit and happy.

The Indian dealer has a little habit which is rather misleading. The birds (or most of them) are only REALLY fed in the morning and evening. These are certainly the right times, though my trapping experiences have shown me that, at midday, the time during which I always thought that most birds out here were taking their siesta, they are really on the steady feed, at any rate where there is thick jungle. A large percentage of the birds I have trapped were taken between 12 and 2 p.m. This morning and evening game is sound when other food which they may eat is left in, but I saw a case where a Lahore dealer could not keep Zebra Finches (got them for me); on enquiry I found the seed was taken away at night not to attract mice; very good; but I found it was taken away some time before dark and put back some time after dawn, just the times it was most wanted especially in the cold weather.

To return to these dealers, they well know that sahibs (of whatever colour), especially if it is a white sahib, much perfer a bird that is easy to keep. He prefers to say the bird feeds on seed, failing that he suggests bread and milk with banana, or satoo and ghee, carefully concealing the fact that his insect eaters get a liberal dose of live insects every night and morning, and that a good many of them practically live on this. Very few, at any rate of the more difficult ones, are really meated off as we should understand it, though I think the fault with us is, as a rule, to cut the insect supply too short. Still, if birds are to travel, they must be more or less meated off. For instance at my afternoon visit at another shop I was told that Hanging Parrakeets only eat canary seed, yet those very birds at my morning visit were having a good tuck in at boiled rice and milk, sweetened. Of course the dealers recognised me, but a sahib would never notice a little thing like that. The Niltava eats only satoo, as the sahib can see for himself there is only satoo in his cage, and look, that Bulbul is actually eating satoo, what more can the sahib want as testimony of truthful words. As a matter of fact that Niltava had not even dug into his satoo in hopes of finding insects there. If pressed the dealer will own up to the insects, but add they are quite unnecessary, but cheaper, and that the sahib (may he soon become a lord sahib) has no need to think of cost of feeding his birds. This may or may not wash: it did not with me of course, and I refused to take the Niltava at any price unless I also took away with me (at a heavy price of course) a good supply of the food mentioned by Mr. Finn, shelled millet and dried flies. I fancy the Chinese shipper avenges the sahib by concealing the existence of this from the Indian dealer, I offered high prices and could get no information even.

I wish the native was more open with his little secrets. He seems to think it a good thing for him if the sahib's bird dies soon, as then he will be able to sell him another, when as a rule it only puts the sahib off birds altogether, whereas, if successful with one the sahib would be pretty sure to want some more, and the dealer would score in the long run. These Calcutta dealers looked after their birds well, which is more than can be said for the up-country man, whom I have found to be dirty and lazy, and does not seem to understand birds, which he regards as so much stuff to be got rid of at a high price before they die. As a result of this he will only buy the very hardiest and usually commonest birds for which he asks exorbitant prices. However, this particular Lahore dealer did not profit himself much by forcing me to pay a visit myself to Calcutta.

Drove back to the hotel, feeling that I had about got all I could in the time, but regretted there was no time to visit the New Bazaar, where, so I was told by a planter who shared a room with me on the roof, there were always lots of birds. I then visited the manager and took out the birds I had marked down. He told me he had one more inside, I might like it. It was now getting dark, but I at once recognised the shape of a Gouldian. Was it a cock or hen ? Hurrah, it was a hen. Now I felt happy, but there was still lots to do. My ticca boy, hired for the day, was sent out in search of string and tins, while I went out to get some American cloth and do a little non-bird shopping, and then we had a busy time fastening up cloth and tins to make the birds comfy for their journey to colder parts. Finished only just in time for a hurried dinner, and arrived a bit late at the station for the Punjab mail, leaving about 9.30 p.m. I think. With a little palm oil, got safely into the trian, the birds in the brake and myself in a carriage full of real undiluted babu. However if one pays second class, I do not see that one can complain of second class company, and they soon got out. Early the next morning got the birds in the carriage with me, and had rather interesting company, who did not object to my putting the birds where I could see them. Spent that day, the 24th, in disposing of them in my avairies (in my mind's eye of course) and imagining what they would look like flying about.

Arrived at Jullundur at about 10.30 a.m. on Christmas Day, very pleased with the results of my little jaunt. To most people the results will seem a very poor return for the trouble taken, and even to me now, looking at the list of purchases simply as purchases, they do look a bit paltry, but it does make a lot of difference when one succeeds in getting anything, however small, after long and fruitless labour. I think I got more pleasure in getting this little lot than out of much larger and rarer lots since obtained, for the simple reason that I put in much more work. Also this visit was the means of my obtaining the rarer birds, through the kindness of Mr. Ezra, whose acquaintance I should not otherwise have made.

Lost two Sivas and two Hanging Parrakeets almost at once, before going into camp at the end of the month, where we stayed till the beginning of March, and cruel bad weather we had. I had one large tent as a dressing room and private office, but to the casual observer it looked more like a bird and dog room. I kept a Sunrise oil stove burning at nights and sometimes by day and do not think the birds suffered from cold, though I did lose the White-eyes and the Sivas and a few small birds. The latter I am sure died from getting paddy rice stuck in their throats, I have had other losses since from that cause, and I fear the others died from want of suitable food. I ought not to have tried them under the circumstances, but I could hardly forsee that we should be so long in camp and that my fool of a mali, left in charge of the house, would be unable to find and send down the insect food I left in Bakloh.

Of course I now wanted more and I'm afraid I rather worried Mr. Ezra with letters as to birds and how to get them up. He gave me news of birds, saying that Scott was expecting a good consignment of Australian birds in my line, sending me the price list, but was sorry he could give me no help in bringing them up, but would see them off if I could send a man or make any arrangement. Fortunately on the list were Bull Terriers and our doctor happened to see the list and wanting a dog, suggested that my man should go at our joint expense. I had been rather shying off more expensive journeys so soon after my Christmas trip, so this suited me well, when the doctor was suddenly ordered off to a frontier station and spoilt the idea of shared expenses. However in the meantime I had begun to fancy those birds already in my aviary, so only waited the arrival of the birds in Calcutta to send my man down.

Fortunately this happened just after our return to Bakloh, but I, before the arrival of the birds, had to go to Lahore to play football for the Gurkha Cup (at my age) and met the birds returning at Pathankote on my way down. They were beauties, and thanks to Mr. Ezra's kindness and care had travelled splendidly, though there was a casualty or two. They consisted of five lovely Mealey Rosellas and four Yellow Budgerigars from Mr. Ezra's collection, and six Diamond Sparrows, ten Gouldians, two Masked and four Long-tailed Finches (all under the name of Masked), two cocks and one hen Crimson, three Star (I mean Ruficauda, all turned out cocks), four Musky Lorikeets (sold under the name of Keith's Parrakeets), two pairs of Many-coloured Parrakeets, a pair of Cockatiels and some others to ensure my breeding stock of birds I already had, such as Cherry (and even then I only got one hen) and Chestnut Finches, White Javas, etc., from Scott. A lot that would please anyone. I was almost pleased that we lost our football tie and so did not have to go to Almora to play again. I visited the Lahore dealer as usual and found he had some Budgerigars and a nice cock Many-colour, which he at first pretended he had got especially for me. I asked him where was the hen and why he did not get two pairs which is my standing order with him (not that he had ever got anything for *me* yet) and he said the hens were not bright coloured before he saw his mistake, but he wasn't a bit abashed. I took rather a delight in pricing his birds (he had some Pekins too) and telling him I should certainly have spent much money with him, had he not forced me to go Calcutta myself. I came away with some Indian Finches I did not really want.

How I wished afterwards that I had taken that Many-colour, as on my return I found one dead, also several small birds, though they were just as well looked after in my absence. I should be sorry to own up to the casualties that happened in the next month especially amongst Gouldians and Diamonds. Scott wrote to me later, saying that never again would he import small Australians and I can hardly blame him though he had quick sales. I cleared him out of some species. I am sure the newly imported Australians are "difficult," but that, once really seeded off as one may say, they are as hardy as any other.

I wrote at once to Lahore about the Many-colour giving three alternatives. I was asked a really absurd price for it delivered up here at once, a pretty stiff one if he promised to keep it for me till he came up my way in about a month, and for him quite a reasonable price if I fetched it from Lahore or took my chance of it being unsold when he came up. I like a fool told him to keep it for me at a stiffish price, when it would have cost little more to have sent down for it. In about two months I wrote asking when I might expect the bird and was told that it had been "expended" long ago. Expended in this case, as I afterwards found out, meant sold.

I have paid no more visits to Calcutta, but have been very fortunate in having friends on visits and so, through the repeated kindness of Mr. Ezra, have been able to replenish my stock from time to time. I have also done a certain amount of shopping, but I think it is time this article was brought to a close, at any rate for the present. If Mr. Editor wishes, I will, another time give more of my experiences, adding some breeding results and selling transactions, except that I am apt to lose my temper when thinking too much of these latter. Bird collecting excursions from a trapper's point of view, I am sure would be of interest to many (however badly written), but that must wait for some time to allow me to collate my experiences for the year.

Stray Nesting Notes for 1907.

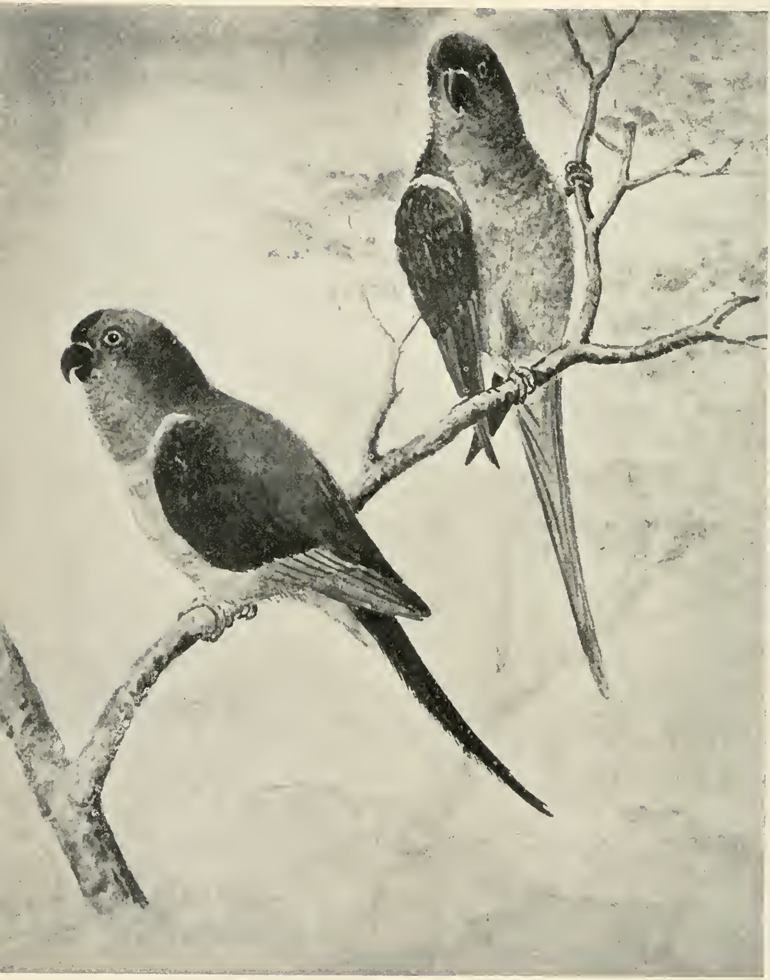
By Mrs. H. BROMET.

I have been asked to write an account of the nests in my outdoor aviary, but this last summer is the worst year I have ever experienced, and I have only reared two young birds.

Out of the seven Gouldians I bred in 1906, only two hens remain; the others seemed to be seized with a kind of paralysis when getting the adult plumage. They were in a heated aviary, and there seemed to be no cause for it. My two old Gouldian cocks came through the moult beautifully, and finding I had a hen from each nest, I was able to pair them with the unrelated cock birds. They examined all the nest boxes, but never seemed anxious to nest, though they are lively, healthy birds. After November, I put them into a three division Crystal Palace cage; this I always do until the winter is over. I have had a great many Gouldians, and I do not find them at all hardy, though I have had my two cock birds nearly four years.

I let my pair of Parrot Finches out into the aviary in April. They started to nest at once, building in a small Canary travelling cage with the door off. This the cock bird quickly filled with moss, feathers, and unfortunately a small piece of string. It was a lovely nest with a kind of porch over the entrance hole. I never dared examine it closely, as both birds were very shy and wild. After this, one bird was always missing, and I waited anxiously, but was horrified on entering the aviary one morning to find the hen bird just dying. Her mate was flying about very excitedly watching me, then he darted into the flight, and I felt I must look into the nest, knowing the eggs should be just about hatching. So it was, they were just hatched. I decided to leave them alone, and see if the male bird would go to them. After making a good meal on egg and biscuit, seed and grass, I saw him enter the nest, and after that I had great hopes, and the chirping got louder and louder. At the end of ten days, I was crossing the lawn, when I heard the cock Parrot Finch give his loud, shrill whistle, which I call the alarm signal. On entering the aviary, I found one young bird hanging from the entrance to the nest, strangled in the piece of string I named. It was dead and such a fine, fat bird. After I took it off (this was at 8 a.m.) it was noon before the old bird returned to the nest; I was in despair. However, nothing further happened, and at the end of a month, three fine birds flew out. I was away from home a month, and on my return found the young birds just coming into colour. I have only one youngster left, for rats found their way into the flight, and took one young bird and a Chinese Quail. Another Parrot Finch was caught in a trap, set when I was ill and not made secure from the birds. I have now had the whole flight concreted, so there will be no fear for the future, and as I have bought two more Parrot Finches, I hope I shall have better luck this year.

The Bengalee hen who paired with a Spice bird in 1906 and bred four hybrids, this year mated with a Bengalee cock, (I having sold the Spice bird). She hatched three young birds, and



GOLDEN-CROWNED CONURES

(*Conurus aureus*)

Photo by E. O. PAGE, *from a water colour drawing, by* J. C. PARK, *from living specimens in the collection of* F. SOMERS, ESQ.

two of these were drowned; the other is a fine bird, brown like the Spice bird, only the pencilling is more marked. He has paired with a Bengalee.

My Avadavats hatched three young ones, reared them for ten days and then deserted them.

I have a lovely pair of Crimson Wing Parrakeets which I hope will breed this year.

The Golden-crowned Conures.

(*Conurus aureus*).

By Wesley T. Page, F.Z.S.

The plate for which these notes are written, is a photo from a water-colour drawing by Mr. J. C. Park, drawn from living birds in the possession of our esteemed member, Mr. F. Somers, M.R.C.V.S., whom I have failed in persuading, so far, to write an account of his interesting pets.

This is another species which so far has not been bred in this country, and which even town and city folk might risk in their garden aviaries, and be, perchance ? the fortunate one to breed the species for the first time; at any rate it is a very handsome species and well worth keeping for its beauty and activity alone. It is of graceful and slender build, and though seeing it on the wing is a treat yet in store for me, it needs but little exercise of the imagination to deduce, how charming they would be in a roomy flight.

Description: Upper half of body plumage, vivid green (quite bronzy in some lights), suffused with light blue; the secondaries, outer webs and lower portion of flights of the same brilliant hue; lower surface light grey; the head is adorned with a golden-orange orbital ring and forehead patch of the same colour; beak blackish; legs and feet, dark grey.

Further notes here are uncalled for, as in Vol. IV., page 279, Dr. Creswell gave a descriptive article on this species illustrated by a coloured plate.

Editorial.

FECUNDITY OF YELLOW BUDGERIGARS AND GOULDIAN FINCHES, ETC.—Again quoting from personal correspondence with our esteemed member Capt. Perreau, it is very evident that the Indian climate is better suited for Australian birds than our own. Of course Budgerigars are very prolific in this country in an outdoor aviary, but I think that Capt. P.'s results (50) from a cock and two hens during one season are certainly remarkable. Not the least remarkable is the fact of two hens dwelling together in unity under one lord and master. The reverse has been the general experience in English aviaries I think, so that it has almost become a rule, that if you want to nullify results have an odd female in the aviary, certainly such has been my own experience and that of many other aviculturists. Capt. P. remarks that the cold season of India though cold for anywhere is not so trying as an English winter. Out of a consignment of 50 imported from England there were comparatively few survivors, the aforementioned Yellow Budgerigars, Long-tailed Grassfinches, Grey-headed Lovebirds, etc.; the Longtails reared six in 1906 and four in 1907. The G. H. Lovebirds reared seven in 1906 and the same number in 1907.

"As regards Gouldians I think I have been very lucky, for which I "think the climate is largely responsible, cold as it is when Gouldians are "breeding, it is far better than the ordinary winter weather at home. I "fully expected snow to-day as four fine young Gouldians left the nest "yesterday (Dec. 29th). In 1905-6, twenty-two were reared from two pairs, "sixteen were left outside and all survived; six were taken indoors and "four died."

Capt. P. promises another article on Gouldians, which I am sure all members will appreciate; from Capt. P.'s experience I deduce that the aviary most suitable for Gouldians should have the greater part of the flight covered in, a combination roof of wood and glass should answer well, and I am of opinion this applies to most species of Grassfinches.

THE BERLIN BIRD EXHIBITION.—The following account, which a German correspondent has sent me, will doubtless interest many of our exhibiting members.

"The Berlin Bird Exhibition opened on January 11th and closed on the "14th. On the day following the close of the Exhibition, Wednesday, the

"15th of January, there was a lottery of birds; two hundred and one "splendid birds and cages being offered as prizes.

"Twelve thousand lottery tickets, at sixpence each, were on sale at "the Exhibition. On the day of our visit we were informed that nearly "eight thousand tickets had been sold. The idea was distinctly a good "one, and the rapidity with which the tickets went off showed the interest "which the general public took in the proceedings. The Exhibition was "well patronised by visitors, especially on Sunday, which unfortunately is "the great day for sight seeing in this country.

"The Exhibition was held in two large halls, called the Rosenthaler "Hof in Rosenthaler Strasse, Berlin. They were lofty and well ventilated, "but the piercing cold outside made it necessary to enclose the cages of "many of the smaller birds in an outer frame work of panelling and glass, "the latter forming a doorway to the cage within and being in every case "shut. The fact that ground glass was used made it impossible to see the "occupants of the cages without opening the glass doors, and then the "interior was often too dark to examine the bird critically.

"In the second of these large halls, in which the foreign birds were "principally placed, the cages were much more roomy and open, so that "the birds could be studied better.

"Here in company with the foreign birds were several monkeys, a "flying lizard and other similar animals, while numerous exotic plants "and the trailing of greenery over the cages lent a charming aspect to "the hall. The exhibits from China, Java, and Japan were most interest- "ing. Particularly striking in the first section was a large cage full of "Chinese Nightingales, all of them beautiful specimens. From Java we "had a specimen of the *Xantholæma rosea*, and several examples of the "more common birds of Java. The Japanese birds included a collection of "the Japanese Sea-Mews and the *Pavo nauticus* of the Malay and Japanese "archipelago. Birds of Paradise were to be seen in their beautiful "plumage. Crowds of Rice Finches and the seldom seen Desert Sparrows "were in evidence; while to enumerate the varieties of Parrots, Paro- "quets and Cockatoos would be a long task indeed.

"In the same hall cages of all sorts, bird foods and every requisite for "bird keeping were to be seen.—J.W.R."

A COLONY OF TRI-COLOURED BLACKBIRDS (*Agelaius tricolour*). From an article by J. G. Tyler in the Nov.-Dec. issue of the "Condor" I have extracted the following,

"The last day of April of this year (1907) found me in the fields about "30 miles S.W. of Fresno. Large wheat and alfalfa ranches extended for "some miles......crossed by large canals or sloughs besides many smaller "ones.........I noticed a number of Tri-coloured Blackbirds flying out from "a point somewhere to the west of me......an equal number were con- "stantly flying up from the ground and returning in the direction from "which the others came......About half a mile from where first seen, I "came suddenly upon a patch of nettles, about half an acre extent, grow- "ing in a low, damp sink that was really the end of a large abandoned "slough......the growth was very dense and in some parts six feet high...... "on two sides of this pitch was a more or less dense fringe of willows...... "a hasty search soon revealed several nests on the bare ground among the "growing foxtail grass."

Fear of the nettles caused the writer merely to skirt the patch for some time, but after stings in the face, etc., he plunged boldly in regardless of consequences; for many reasons the time he spent there will never be forgotten as the following indicates:—

> "There were nests everywhere: in some instances three or four built "on top of one another, though in such cases only the upper one "appeared to be occupied. The average height from the ground was "between one and three feet, but many were seen that were ten and "twelve feet up in the willows. They were all built almost entirely of "grass stems that had been freshly pulled, giving the nests a bright, "green appearance. Some of them had a few course brown weed stems "woven into the framework, but in the majority no other material but "grass was used, and none contained any lining. As the heads of the "grass had not been detached, the nests presented a ragged, fuzzy appear-"ance. In size and shape they varied greatly, due no doubt to the different "situations in which they were built. Many of the nests contained eggs, "and it would be impossible for me to describe the wonderful variations in "size, shape and colour; but the most common type was a blue ground "colour, with a few heavy (rust-coloured) scrawls on the large end......
>
> "Where the nettles were thickest nearly all the nests contained young "birds......I made several attempts to count the nests......after a few "attempts I gave up, and attempted to estimate the number of birds "in sight, this again was hopeless and could only content myself with "saying—There must be hundreds of them."

The writer states that some of the features which will prevent this nesting experience from being forgotten were not pleasant ones—the heat was very great—mosquitoes numerous and any attempt to brush these away usually brought one's skin in contact with the nettles—this amply illustrates the extent of the inconvenience and unpleasantness, etc., which ornithologists, aviculturists, etc. are prepared to undergo in the pursuit of new facts connected with their fascinating pursuit or hobby.

ERRATUM: Page 314, third line from bottom for syrays read *sprays*. Page 317, line 24 for Black-headed read *Black-backed*. Page 317, line 8 from bottom for Lesterops read *Zosterops*. Page 320, *Post mortems*, for Rock Rosa Parrakeet read *cock Rosa, etc.* Page 320, *Post mortems*, line 2 from bottom, for modular read *nodular*.

Post Mortem Reports.

(*Vide Rules*).

PARSON and PARROT FINCHES. (Charles H. Rowe). Cause of death pneumonia, no doubt due to climatic changes.

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Good, Mrs., 37, Glengarry Road, East Dulwich, S.E. (Oct., 1905).
Goodchild, H., M.B.O.U., 66, Gloucester Road, Regent's Park, N.W. (July, 1903).
Gorringe, The Rev. Reginald E. P., Maxey Vicarage, Market Deeping, Northants (Dec., 1902).
Gray, H., M.R.C.V.S., 23, Upper Phillimore Place, W. (May, 1906).

Hall, Miss A. E., 2, Park Place Villas, Maida Vale, W. (June, 1906).
Halliwell, J., M.R.C.V.S., 11, Westbourne Grove, West Kirby (March, 1903).
Harding, W. A., F.Z.S., Histon Manor, Cambridgeshire (Dec., 1903).
Harman, J., Tubbs Road, Harlesden, N.W. (Feb., 1903).
Harrison, J. H., 18, East Beach, Lytham (Dec., 1901).
Hatcher, J. F., 168, Upper Thames Street, E.C. (June, 1903).
Hawkins, L. W., Estrilda, New Clive Road, West Dulwich (Orig. Mem.)
Healey, Mrs., 12, Rossetti Gardens Mansions, Cheyne Walk, S.W. (Feb., 1903).
Hollins, Miss, Greyfriars, Preston, Lancashire (Feb., 1906).
Hollins, J. T., 7, Lowther Arcade, Harrogate (May, 1903).
Hopkinson, Emilius, M.A., M.B. Oxon., D.S.O., 45, Sussex Square, Brighton (Oct., 1901).
Horton, L. W., Hill House, Compton, Wolverhampton (Sept., 1902).
Hosford, S. R., Highfield Avenue, College Road, Cork (Nov., 1906).
Houlton, Charles, Laburnum House, Denton's Green, St. Helen's, Lancs. (Nov., 1901).
Howe, Frank, 65, Thomas Street, Wellingborough, Northamptonshire (Feb., 1902).
Howe, Mrs. James, Moss Lodge, Ashton-under-Lyne, Lancs. (July, 1903).
Hubbard, Mrs. D. L., Casa Sta. Monica, Bordighera, Italy (Jan., 1905).
Hulton, Lady, Hulton Hall, Bolton-lea-Moors. (June, 1903).
Hume, James, Hepscott, Morpeth. (June, 1903).
Humphrys, Russell, Southborough, Bickley (July, 1902).

Ide, Harry, L.D.S.R.C.S. Eng., Eden Street, Kingston-on-Thames (June, 1903).

Jardine, Miss E. L., Lady Superintendent, Freed Slaves' Home, Zungaree, Northern Nigeria (Dec., 1902).
Jeffs, W., Bronwen, Villa, 24, Avenue Road, Darlaston (Oct., 1904).

Kestermann, Herr Hermann, 3, Südstrasse, Greig i. V., Germany (Feb., 1903).

KEULEMANS, F. G., 3, Uphall Road, Ilford, Essex (June, 1906).
KEYTEL, P. C. Brighton Castle, Mouille Point, (P.O. box 633), Cape Town (June, 1903).
KING ALFRED'S SCHOOL, The Librarian of, Wantage, Berks. (April, 1906),

LAFFAN, Mrs. DE COURCY, 119, St. George's Road, S.W. (March, 1905).
LANE, The Hon. Mrs., King's Bromley Manor, Lichfield (April, 1205).
LAMB, E. J., 10, Knight's Park, Kingston (May, 1906).
LANE, Miss, The Deanery, Rochester (April, 1905).
LEVERKÜHN, Aulic Counsellor Dr. PAUL, M.D., C.M.Z.S, Director of Scientific Institutions, The Palace, Sophia, Bulgaria (July, 1903).
LITTLE, Miss C. ROSA, Baronshalt, The Barons, East Twickenham (Nov., 1902).
LONDESBOROUGH, The Dowager Countess of, 17, Norfolk Street, Park Lane, W. (May, 1905).

MARTIN, T. J., High Street, Lowestoft (Nov., 1903).
MASKEW, Mrs,, St. Paul's Vicarage, Peterborough (April, 1906).
MASTER, G., M.B., B.C., 86, Guildhall Street, Bury St. Edmunds (Nov., 1903).
MELLOR, Mrs., Fair Lawn, Lytham, Lancs. (July. 1904).
MILLER, Mrs. K. LESLIE, 27, Belgrave Road, S.W. (Jan., 1904).
MITCHELL, P. CHAMLERS, M.A., D.Sc., F.Z.S., M.B.O.U., Secretary to the Zoological Society of London, 3, Hanover Square, London, W. (April, 1905).
MOMBER, A. R. T., La Tuinia, San Remo (Oct., 1906).
MORTIMER, Mrs., Wigmore, Holmwood, Surrey (Nov., 1901).
MURRAY, IVAN, D., Toddington Park, Dunstable, Beds. (June, 1906).
McDONAGH, J. E. R., M.R.C.S., L.R.C.P., F.Z.S., F.L.S., St. Bartholomew's Hospital, London, E.C. (Jan., 1903).
McLAREN, The Hon. Mrs. MORRISON, 3, Redcliffe Square, S.W. Nov., 1906),
McKILL, A. R., Ashfield Lodge, Thorner, near Leeds (Dec.. 1902).
McMATH, WM., M.B., 6, Camden Place, Cork (Jan., 1904).

NEWBOULD, T., Avoca, Linthorpe, Middlesborough (Dec., 1902).
NEWMAN, T. H., F.Z.S., M.B.O.U., Newlands, Harrowdene Road, Wembley, Middlesex (July, 1903).
NORTHBOURNE, The Lady, Betteshanger, Eastry, S.O., Kent (May, 1905).

OAKEY, W., 34, High Street, Leicester (Orig. Mem.)
OBERHOLSER, HARRY C., 1349, Harvard Street, Washington, D.C., U.S.A. (Dec., 1903).

O'Reilly, Nicholas S., 9, Royal Crescent, Ramsgate, Kent (Orig. Mem.)
Osbaldeston, William, 11, Stephenson Terrace, Preston, Lancs. (Orig. Mem).

Page, W. T., F.Z.S., 6, Rylett Crescent, Shedherd's Bush, W. (May, 1905).
Partridge, Mrs., Loxia, Richmond Road, Worthing (Dec., 1905).
Perkins, E., Chester Hill, Woodchester, Gloucestershire (Feb., 1903).
Perreau, Capt. G. F, 2/4 Gurkha Rifles, Bakloh, Punjab, India (Dec., 1903).
Perring, C. S. R., 4, Cambridge Villas, High Street, Teddington (Oct., 1902).
Perryman, C. W., Bifrons, Farnborough, Hants. (July, 1902).
Picard, H. K., 10, Sandwell Crescent, W. Hampstead, N.W. (Oct., 1901).
Pickles, W. H., Stoneyhurst, Morecambe, Lancs. (May, 1904).
Pond, Mrs. T. A., 174, Upper Parliament Street, Liverpool (Nov., 1902).
Porteous, James T., Deneholme, Hexham (Sept., 1903).

Restall, J. A., 82, Cambridge Street, Birmingham (Nov., 1903).
Rice, Capt. G., Clayquhat, Blairgowrie, N.B. (July, 1902).
Richard, E., Hotel Metropole, Brighton (Nov., 1901).
Rogerson, Mrs., Fleurville, Cheltenham (Feb., 1903).
Rotch, C. D., 3, Beach Lawn, Waterloo, near Liverpool (Orig. Mem.)
Row, C. H., Irene House, Cornard Road, Sudbury (Dec. (1905).
Rycroft, Mark E., 8, Park Street, Wakefield (April, 1903).

Salt, Thomas, L. R. C. P., Yiewsley, Saltley, Birmingham, (July, 1903).
Savage, A., 3, Rue Bihorel, Bihorel, Rouen, France (Dec. 1901).
Scott, Professor W. E. D., 341, Nassau Street, Princetown, New Jersey, U.S.A. (Sept. 1902).
Seth-Smith, David, F.Z.S., M.B.O.U., 14, Canning Road, Addiscombe (Nov. 1903).
Smithwick, Capt. W. F., Youghal House, Nenagh, Ireland, (Dec. 1902).
Snell, S. H., M.D., 261, Trinity Road, Wandsworth, S.W. (March, 1904).
Somers, Frank, M.R.C.V.S., 66, Francis Street, Leeds (Jan. 1907).
Speed, Hedley, 12, Victoria Park, Bangor (Nov. 1901).
Stevenson, B., 69, Margravine Gardens, West Kensington, (Jan. 1907).

STOREY, JAMES, 7, Blenheim Terrace, St. John's Wood, N.W. (Orig. Mem.)
STROUD, LIONEL, F.R.C.V.S., 29, Spring Street, Paddington, W. (June, 1906).
SUGGITT, R., Suggitt's Lane, Cleethorpes (Dec. 1903).
SWAN, J. A., 87, Lower Kennington Lane, S.E. (Oct. 1901).
SWAYSLAND, W., 47, Queen's Road, Brighton (Orig. Mem.)

TANNER, F. L., L.D.S.R.C.S. Eng., Vauvert House, Guernsey, (Feb. 1904).
THWAITES, GEORGE, Dunedin Villa, Northampton Road, Market Harborough (Feb. 1903).
TOMASSI BALDELLI, La Contessa G., 4, Via Silvio Pelico, Florence, Italy (Dec. 1901).
TOWNSEND, S. M , 3, Swift Street, Fulham, S.W. (Orig. Mem.)
TOYE, Mrs. M., Stanhope, Bideford, N. Devon (Nov. 1901).
TRAVERS, Miss ANNETTE, Kingcraigee, Courtmacsherry, co. Cork (Dec. 1903).
TRECHMANN, Dr. MAX M., 131, St. George's Road, S. W. (Dec. 1904).
TRUE, WILL, 74, Comeragh Road, London, W. (Jan. 1905).

VERE, The Very Rev. Canon, 21a, Soho Square, London, W. (Nov. 1903).
VERNON, Mrs., Toddington Park, Dunstable, Beds. (Oct. 1905).

WALLACE, JAS. SIM, D.Sc., M.D., C.M., 30a, Wimpole Street, London, W. (Jan. 1904).
WARDALE, H., Willington House, Willington Quay, Northumberland (May, 1903).
WATTS, RUDOLPH, Wilmar, Wiggenhall Road, Watford (Nov. 1906).
WEBB, W., 1, North Road, Surbiton (Jan. 1904).
WHEELER, ALFRED, 2, West View Terrace, Droitwich Road, Worcester (Sept. 1903).
WHITTAKER, T. H., Ravensmere, Marine Drive, Ansdell, Lytham, Lancs. (Dec. 1903).
WILDE, Miss MAUDE, Little Gaddesden, Berkhampstead, (Nov. 1901).
WILMOT, The Rev. RICHARD H., Poulton Vicarage, Fairford, (Nov. 1902).
WILSON, Miss F. M., 34, Charrington Street, London, N.W. (March, 1906).
WILSON, T. N., M.A., Oak Lodge, Bitterne, nr. Southampton (Jan. 1902).
WINCHILSEA and NOTTINGHAM, The Countess of, Harlech, Merioneth (June, 1903).
WOOLSTON, T., 22, Wilson Street, Middlesborough (Oct. 1903)

WROTTESLEY, The Hon. WALTER B., F.Z.S., 8, Herbert Crescent, S.W. (Dec. 1902).

YALLOP, F. J., 85, Prince of Wales Road, Norwich (July, 1902).

☞ *The Hon. Editorial Secretary requests that he may be promptly advised of any errors or omissions in the above list.*

March, 1907.

ROLL OF ASSOCIATES.

BULLOCK-WEBSTER, A., King's Close, Barnstaple (Oct. 1902).

CURTIS, Mrs. D. W., Market Place, Stowmarket (Sept. 1902).

GORDON, Miss, 57, Burlington Road, Bayswater. W. (May, 1904),

HALLIDAY, CHARLES, Bridge Street, Banbridge, co. Down, (June, 1903).
HARRIS, CHARLES, 15, Clayton Street, Newcastle-on-Tyne, (Oct. 1902).
HARTON, Miss E., 53, Goldhurst Terrace, South Hampstead, N.W. (Nov. 1903).
HAWKE, The Hon. M. C., Wighill Park, Tadcaster. (Nov. 1902).
HENTSCH, W. J., Douglas Villa, Acacia Grove, New Malden, Surrey (Jan. 1904).
HINCKS, Miss E. M., Baron's Down, Dulverton (Jan. 1903).
HOWMAN, Miss, Sherwood, Essex Grove, Upper Norwood, S.E. (Nov. 1901).
HYDE & Co., Ltd., R., Harold Street, Camberwell, S.E. (May, 1902).

LEE, Miss CONSTANCE, Budleigh, Salterton, R.S.O., Devon, (Dec. 1904).
LOCK, Miss M., 82, Southwold Mansions, Elgin Avenue, Maida Vale (Feb. 1906).
LYTHGOE, G. W. F., 25 Stamford Street, Old Trafford, Manchester (Nov. 1906).

MARSHALL, Mrs., Ashley Warren, Walton - on - Thames, (Dec. 1903).
MARTIN, Mrs. HORACE, 13, Hillside, Wimbledon, Surrey. (May, 1904).
MCADAM, Mrs. J., 24, Cambridge Terrace, Hyde Park, W. (June, 1903).
MITCHELL, H., Duchy Court, Harrogate (Sept. 1903).
MOORE, Mrs. G. W., Moore House, Finchley Road, St. John's Wood, N.W. (Oct. 19c3).

NICHOLSON, Miss M. E., Meadow Croft, Upton, Birkenhead, (June, 1903).
NORTH, JOSIAH, 314, Oxford Road, Reading (Sept. 1904).

PANTON, Miss MAY, 14, King Edward's Road, Oldfield Park, Bath (June, 1903).
PENGELLEY, CHARLES H. C., Hollywell, St. Ives, Hunts, (Oct. 1903).

SAYWELL, Miss THEODORA, The College, Bromsgrove, Worcestershire (Oct. 1902).
SEVASTOPULO, Mrs. G. D, 147, Gloucester Terrace, Hyde Park, London, W. (Oct. 1901).
SHARP, H. S., Heathfield, Bingley, Yorks (Nov. 1901).
SLATTER, A. C., 17, Commercial Street, Hereford (July, 1903).

TWEED, H. R. B., B.A. Oxon., Laindon Frith, Billericay, (June, 1903).

WARD, The Hon. Mrs. SOMERSET, Carrowdore Castle, Donaghadee, co. Down (Oct. 1905).
WILSON, H. R., Anglehám, Rosebery Crescent, Newcastle-on-Tyne (Dec. 1903).
WITHERS, H. B., 249, High Street, Watford, Herts. (Nov. 1906).
WRIGHT, Mrs., New Brook, Atherton, Manchester (Oct. 1904).

☞ *The Hon. Editorial Secretary requests that he may be promptly advised of any errors or omissions in the above list.*

RULES.

1. The objects of "The Foreign Bird Club" shall be the mutual encouragement and assistance of the members and associates in the keeping, breeding, and exhibiting of foreign birds, and the improvement of shows in regard to them.

2. The Club shall be composed of members and associates. Every member shall pay an entrance fee of 2/6 and an annual subecription of 10/-. Every associate shall pay an entrance fee of 2/6 and an annual subscription of 5/-. Associates shall have such of the privileges of members as the Council shall from time to time direct. Subscriptions shall be due and payable in advance on the 1st of March in each year. If any member's or associate's subscription shall be more than three months overdue he shall be suspended from all the benefits of the Club, and if more than nine months overdue, notice of his having ceased to be a member or associate of the Club, and of the cause, may be published in the Notices to Members; and on such notice being published he shall cease to be a member or associate accordingly, but his liability for the overdue subscription shall continue.

3. New members shall be proposed in writing by a member of the Club and new associates by either a member or an associate: and the name and address of every person thus proposed, with the name of the person proposing him, shall be published in the Notices to Members. Unless the candidate shall, within fourteen days after the publication of his name, be objected to by at least two members, he shall be duly elected. If two or more members lodge with either of the Secretaries objections to any candidate he shall not be elected, but the signature to the signed objections must be verified by the Scrutineer. The Secretaries and the Scrutineer shall not disclose the names of the objectors. Associates desirous to become members shall go through the same form of election as other candidates but shall not pay an entrance fee.

4. Any member or associate wishing to resign at the end of the current year of the Club shall give notice of his intention to one of the Secretaries before the 1st of February, and in default of such notice he shall be liable for the following year's subscription.

5. The officers of the Club shall be elected from the members and shall consist of a President, one or more Vice-Presidents, an Auditor, a Scrutineer, one or more Secretaries, a Treasurer, a Council of twelve members, and such number of Judges as shall from time to time be determined by the Council. The Secretary or Secretaries and the Treasurer shall be ex-officio members of the Council. The Secretary or Secretaries, the Treasurer, the Council, and the Judges shall

be elected annually by the members in manner hereinafter provided. The other officers shall be elected annually by the Council immediately after their own election.

6. The election of the Secretary or Secretaries, Treasurer, Council, and Judges shall take place every year between the 15th of January and the 5th of February. The Secretaries shall ascertain which of the members are willing to stand for election to office, and shall send to each member of the Club, on or about the 15th of January, a voting paper containing a list of all such members, showing the offices for which they are respectively seeking election. Each member shall make a cross (×) apposite the names of those for whom he desires to vote, and shall sign the paper at the foot and send it in a sealed envelope to the Scrutineer, so that he may receive it before the 5th of February. The Scrutineer shall prepare a return of the officers ellected, showing the number of votes recorded for each candidate, and send it to one of the Secretaries for publication in the Notices to Members for February. The Scrutineer shall not reveal to any person how any member shall have voted. In the event of an equality of votes the President shall have a casting vote.

7. Dealers in birds shall not be eligible for election to any office in the Club, except that of Judge. For the purpose ot this rule, any member who habitually buys birds with the intention of selling them again shall be deemed a dealer in birds. Before the annual election of officers, the Secretaries shall submit to the Council the list of members willing to stand for election to the Secretaryship, the Treaturership, and the Council, and the Council shall remove from the list the name of any candidate who shall be, in the opinion of the Council, a dealer in birds within the meaning of this rule. The decision of the Council, or of any Committee to whom the Council shall delegate its powers under this rule, shall be final. When a dealer is proposed as a member of the Club, the fact of his being a dealer shall be stated in the Notices to Members.

8. It shall be lawful for the Council to delegate any of its powers to a Committee.

9. The Council may appoint an Arbitration Committee, which may decide questions at issue between members and associates when requested to do so by both parties. Any decision of such Committee shall be final. Except to the extent permitted by this rule, the Club and its officers shall decline to concern themselves with disputes between members.

10. The Council shall have power to alter and add to the Rules, but shall give to the members notice of any proposed alteration or addition, and in the event of six members objecting thereto within fourteen days the proposed alteration or addition shall be submitted to the votes of the members. Failing such objection the alteration or addition shall date from its adoption by the Council.

11. The Council shall have power to expel any member or associate at any time.

12. Neither the office of Scrutineer nor that of Auditor shall be held for two consecutive years by the same person. The Scrutineer shall not be a candidate at any election at which he acts as Scrutineer.

13. If any office becomes vacant at any time other than at the end of the current year of the Club, the Council shall have power to nominate any member to fill the vacancy.

14. The decision of the majority of the Council shall be final and binding on the Club, but a resolution passed by the Council shall not be acted upon unless there be an absolute majority of the Council (and not merely of those voting) in its favour.

NOTICES TO MEMBERS.

The Magazine Committee regret that there is no coloured frontispiece with which to commence the volume, but the time since our assumption of control has been so limited that this has not been possible. Four plates have been put in hand, and one of them will appear in the April number.

The number of plates given must depend largely (at any rate for this volume) on the support given by members to the Illustration Fund. I have a strong desire to issue one with each number, as well as half-tone illustrations and line drawings in the text: this, of course, must be a matter which the amount of support accorded must decide.

Special attention is drawn to the fact that if the magazine is to flourish, and increase in interest and influence, such is only possible by the members sending accounts of their aviaries and birds accompanied, where possible, by photographs. Much valuable data is lost because it is thought trivial and refers to well-known species—nothing is trivial, and if members will only record their experiences, there is no reason why we should not have an interesting page of miscellaneous notes and items with each issue. Will members residing abroad kindly send field notes etc. of the birds of their respective localities?

For the reason that there was very little copy to hand, I have been unwillingly compelled to inflict much of my own composition on readers, and I trust members will make my task a little lighter in future issues.

Will four of our members come forward with a gift of a coloured plate each? so that the current volume may be a thoroughly successful one. And permit me to urge all to make the FOREIGN BIRD CLUB known to all interested in our fascinating pursuit: the extra income derived from increase of membership will be practically all available for the improvement of the magazine.

It is again proposed, as indicated above, to open an Illustration Fund, that the value of *Bird Notes* may be enhanced in this most desirable feature, to which the smallest donation will be welcomed.

The Magazine Committee invite suggestions as to subjects for future plates; the first four have already been put in hand.

W. T. PAGE,
March 15th, 1907. *Hon. Editorial Secretary.*

The Hon. Editor, who is making a study of sexual distinctions, specially in respect of those species which have the the plumage similar: will be very glad of any bodies which members do not require for their own cabinets. All will be welcome excepting Budgerigars, Cockatiels, Zebra and Ribbon Finches, Bengalese, Java Sparrows and such as have the plumage quite distinct. Insectivorous and fruit-eating species specially desired.

PROPOSED FOR ELECTION AS MEMBERS.

Miss VERA BROMWICH, Pegsdon House, near Hitchin, Herts.
By S. M. TOWNSEND.
Mr. J. DEWHURST, 52, North End Road, West Kensington, W.
By H. GRAY, M.R.C.V.S.
Mr. J. H. HENSTOCK, Market Place, Ashbourne Derby;
Mr. J. HALL, 10, Beverley Road, Chiswick, W.;
Mr. E. TESCHEMAKER, Ringmore, Teignmouth, Devon;
Mr. F. M. BRIDGEWATER, Terriers House, High Wycombe, Bucks.; and
Miss H. L. MORGAN, 108, Craiglea Drive, Edinburgh.
By W. T. PAGE.

THE BIRD MARKET.

The charge is one penny for every four words, including address. All advertisements must be pre-paid, and reach the Editorial Secretary by the 10th of the month.

"**Noeggusei.**"—New food for softbills, guaranteed to contain no egg. After repeated experiments I have hit upon the right ingredients. Eaten readily, no waste, only requires damping. To be obtained at 2s. per lb., samples 6d., from the sole agent,
Mrs. WARREN VERNON, Toddington Park, Beds.

On Sale—Young Senegal Parrot, handsome and acclimatised, £2. Mrs. MILLER, 27, Belgrave Road, S.W.

POST-MORTEM EXAMINATIONS.

The conditions upon which these will be made by Mr. Hy. Gray, M.R.C.V.S., 23, Upper Phillimore Place, Kensington, W., are as follows:

(1) The birds must be sent IMMEDIATELY after death.

(2) They *must* be packed in a box.

(3) *The letter accompanying them must* NOT *be placed in the box along with the birds.*

(N.B. Unless the above conditions are complied with the package will be destroyed without examination).

(4) The letter must detail *as far as possible* all particulars as to (*a*) date of death,
(*b*) length of illness,
(*c*) symptoms of illness,
(*d*) lodgment and feeding of birds, and
(*e*) especially as to whether egg food or inga seed has been given.

(5) The work will be done gratuitously, and a report published in "Bird Notes," but *under no circumstances whatever will a report be sent by post unless a fee of* 2/6 *accompanies the letter and bird.* Pressure of work compels Mr. Gray to make this an invariable rule, and it applies to all members whether they are personally acquainted with him or not.

BOUND VOLUMES OF "BIRD NOTES."

Volume I. is out of print. The Publishers are occasionally able to get second-hand copies.

Of Volume II. there remain only a few copies,			
	to Members and Associates - - -		7/6
	to others - - - - - - -		10/6
Volumes III., IV. & V. *with hand-coloured plates*			
	to Members and Associates	each	10/6
	to others - - - -	,,	15/-
,, ,, *with plates uncoloured*			
	to Members and Associates -	each	7/6
	to others - - - -	,,	10/6

Cases for binding Vols. I., II., III., IV. and V. may be had, price 1/2 each post free.

Application for Bound Volumes and cases must be made to the Publishers.

The cases for binding Vol. V. are now ready.

APRIL, 1907.

The Foreign Bird Club.

NOTICES TO MEMBERS.

THE MAGAZINE: It will be evident to all, that we cannot have many numbers as sumptuously illustrated as the present one (the cost of half tone blocks has however been largely subscribed for); the future must depend entirely on the support given to the Illustration Fund. Copy is very short, and it will certainly militate against the success of the Magazine if we have to work from hand to mouth, as it were. If members will support with copy and donations to the Illustration Fund, the present issue may be taken as indicative, as to what we may hope to reach regularly by a united effort.

OUR MEMBERSHIP: It is my strong desire to see our membership at least doubled this year; and if all help in this matter unitedly, there should be no difficulty about doing so; most know at any rate one whose tastes run in this direction, and by the well worn method of each member introducing another, this object should be achieved with but little trouble.

The Council have decided to award certificates as follows:

1. To the two most successful breeders during each season. (Not necessarily for mere numbers, but also having respect to the species bred).
2. For breeding any species for the first time in this country.

The awards will be made by the Awards and Arbitration Committee, and only from the published accounts appearing in the Magazine; their decision will be final.

W. T. PAGE,

April 15*th*, 1907. *Hon. Editorial Secretary.*

THE ILLUSTRATION FUND.

The Council thankfully acknowledge the following donations:

Mrs. Leslie Miller	£2	2	0
The Editor	2	2	0
Mr. W. H. Foster	1	1	0
Mrs. Mortimer	0	10	0
Mr. J. H. Harrison	0	10	0

VICE-PRESIDENTS ELECTED.

C. Castle-Sloane, F.Z.S.
Clarke, R. H., M.A., M.B.
Hopkinson, E., M.A., M.B. Oxon.

NEW MEMBERS ELECTED.

Bromwich, Miss Vera, Pegsdon House. near Hitchin, Herts.
Morgan, Miss H. L., 108, Craiglea Drive, Edinburgh.
Bridgewater, F. M., Terriers House, High Wycombe. Bucks.
Dewhurst, J. 52, North End Road, West Kensington, W.
Hall, J., 10, Beverley Road, Chiswick, W.
Henstock, J. H., Market Place, Ashbourne Derby.
Teschemaker, W. E., B.A., Ringmore, Teignmouth, Devon.

PROPOSED FOR ELECTION AS MEMBERS.

Dewar, D., Indian Civil Service, Lahore, India.
By Capt. Perreau.

PROPOSED FOR ELECTION AS ASSOCIATE.

Black, Mrs., The Vicarage, Buxton, Norwich.
By Miss Busteed.

THE BIRD MARKET.

The charge is one penny for every four words, including address. All advertisements must be pre-paid, and reach the Editorial Secretary by the 10th of the month.

"**Noeggusei.**"—New food for softbills, guaranteed to contain no egg. After repeated experiments I have hit upon the right ingredients. Eaten readily, no waste. only requires damping. To be obtained at 2s. per lb., samples 6d., from the sole agent,
Mrs. Warren Vernon, Toddington Park, Beds.

Mrs. MILLER has for sale a Lettered Aracari, healthy and acclimatized. 27, Belgrave Road, S.W.

Wanted — Red-headed Cardinal, Diamond Sparrow, Zebra Finch, Ruficauda, all hens. Cock Parson Finch, and pair White Java Sparrows.
Mrs. MORTIMER, Wigmore, Holmwood, Surrey.

The list of winners of Club Medals for 1904-5 were by an oversight omitted from their respective places.

OCTOBER, 1904.

L. & P. O. S. Crystal Palace—
  Silver, Mr S. M. Townsend
  Bronze, Mr L. W. Hawkins
  ,, Mr H. B. Smith
Manchester and Norwich—
  Bronze and Silver, *not awarded**

NOVEMBER, 1904.

Nottingham—
  Bronze, Mr, W. Osbaldeston
Cambridge—
  Silver, Mrs Anningson
  Bronze, Mr W. A. Harding
Bridgwater—*Not awarded**
Preston—
  Silver, Mr W. Osbaldeston
St. Helen's—
  Bronze, Mr W. H. Pickles

JANUARY, 1905.

L. & P. O. S. Crystal Palace—
  Silver, Mr L. W. Hawkins
  Bronze, Mrs Anningson

OCTOBER, 1005.

L. C. B. A. Earls' Court—
  Silver, Mr S. M. Townsend
  Bronze, Mrs Leslie Miller
  ,, Mr M. Picard
Manchester—
  Bronze, Mr W. Osbaldeston
Norwich—
  Silver, *not awarded**

NOVEMBER, 1905.

Preston—
  Silver, Mr W. Osbldeston
Cambridge—
  Bronze, Mr Row

JANUARY, 1906.

Cork—Bronze, *not awarded**

FEBRUARY, 1906.

L. & P. O. S. Crystal Palace—
  Silver, Mr L. W. Hawkins
  Bronze, Mr S. M. Townsend

OCTOBER, 1906.

Great Harwood—
  Bronze, *not awarded**
L. C. B. A. Horticultural Hall—
  Silver, Mr S. M. Towtsend
  Bronze, Mrs Leslie Miller
  ,, Mrs Warren Vernon
Leeds—
  Bronze, *no catalogue received*
L. & P. O. S Camberwell—
  Silver & Bronze, *not awarded**
Manchester—
  Bronze, Mr J. H. Harrison

Nottingham and Preston—
  Bronze, *not awarded**

DECEMBER, 1906.

Norwich—
  Silver, *no catalogue received*

Gateshead—
  Bronze, *not awarded**

JANUARY, 1907.

Cork—
  Bronze, *no catalogue received*

* In accordance with Show Regulations, Rule 10.

S. M. TOWNSEND,
Hon. Exhibitional Secretary.

POST-MORTEM EXAMINATIONS.

The conditions upon which these will be made by Mr. HY. GRAY, M.R.C.V.S., 23, Upper Phillimore Place, Kensington, W., are as follows:

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(*d*) lodgment and feeding of birds, and
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Application for Bound Volumes and cases must be made to the Publishers.

The cases for binding Vol. V. are now ready.

MAY, 1907.

The Foreign Bird Club.

NOTICES TO MEMBERS.

The Magazine: I must again point out to members the necessity of sending in copy, or the Magazine must suffer; besides making my task, which should be a pleasure, almost a burden. If justice is to be done to the matter appearing in our pages, we must have copy in hand a month in advance: this will leave room for choice, so that the contents may be of a varied character. Rough notes, observations, and photographs of either British or Foreign birds, are needed, as well as complete and comprehensive articles. So far I have been unwillingly compelled to inflict a great deal of my own composition on readers, and to prepare it at very short notice. Permit me to draw members' attention to the "Notices to Members," appearing in March issue, and to urge these upon them.

A number of leaflets entitled "Objects of the Club," are distributed with the Magazine this month, and it is hoped that all will make good use of them, so that the effort to double our membership during the year may become an accomplished fact.

W. T. PAGE,

May 15*th*, 1907. *Hon. Editorial Secretary.*

NEW MEMBER ELECTED.

D. DEWAR, Indian Civil Service, Lahore, India.

NEW ASSOCIATE ELECTED.

Mrs. BLACK, The Vicarage, Buxton, Norwich.

PROPOSED FOR ELECTION AS MEMBER.

S. T. HESELTON, 45, Market Place, Bridlington.
By The Editor.

PROPOSED FOR ELECTION AS ASSOCIATE.

H. COOPER, Hitchin Road, Luton.
By Mr. TOWNSEND.

CHANGES OF ADDRESS.

J. H. HARRISON, Frankfort House, 6, Central Beach, Lytham.

C. S. R. PERRING, Melie House, Waldegrove Road, Teddington.

CHARLES H. ROWE, Glen Vue, Cornard Road, Sudbury, Suffolk.

THE BIRD MARKET.

The charge is one penny for every four words, including address. All advertisements must be pre-paid, and reach the Editorial Secretary by the 10th of the month.

"**Noeggusei.**"—New food for softbills, guaranteed to contain no egg. After repeated experiments I have hit upon the right ingredients. Eaten readily, no waste, only requires damping. To be obtained at 2s. per lb., samples 6d., from the sole agent,
Mrs. WARREN VERNON, Toddington Park, Beds.

Wanted—a pair of Zebra Finches from an outdoor aviary.
Rev. R. GORRINGE, Maxey Vicarage, Market Deeping.

ILLUSTRATION FUND.

Judging by the many communications that have come to hand, the illustrations have proved quite an interesting feature, and have been much appreciated; but it must be pointed out, that, unless members generally will carry their appreciation to the extent of subscribing to this fund, they cannot be continued on our present income; but as our membership increases, the need for these appeals should largely disappear.

Such illustrations as have appeared in past volumes have only been possible by the generosity of the few. This ought not to continue, but all should bear their share of this burden.

The Committee urge that each member and associate should contribute a donation to this fund, thus it will fall heavily on none; and neither the bulk of the magazine nor number of illustrations will have to be curtailed.

THE FOREIGN BIRD CLUB.

BIRD NOTES. ILLUSTRATION FUND.

To the Hon. Treasurer,

Mrs. K. L. MILLER, 27, Belgrave Road, London, S.W.

I enclose with much pleasure £ : s.: d. as a donation to this fund.

Name ....

Address ....

Date ....

The Foreign Bird Club.

NOTICES TO MEMBERS.

In the "Bird Market" is an advertisement which will probably prove a great convenience to many members during the holiday season. Birds can be entrusted to Miss Lock's care with the assurance that they will be carefully looked after and their owner's wishes carried out.

Will members and associates please refer to the "Notices" in the March and April issues?

Permit me to remind members that the Illustration Fund still stands in need of much help.

WESLEY T. PAGE,

June 15*th*, 1907. *Hon. Editorial Secretary.*

MOST POINTS *v.* BEST BIRD.

SIR,—During last year, and more particularly at the last Crystal Palace Show, members have complained to me about our medals being awarded for most points and not for the best bird. I promised to bring the matter before the members, but before asking them to vote on the question it is very desirable that some of our exhibiting members should write, and give their views on the subject.

Personally I greatly prefer awarding prizes for the *best bird*—prizes for most points seem to be specially made for secretaries who want to make full classes, and for dealers who like to make a display of the medals; but to me the interest in a prize lies in it being won by a particular bird.

Permit me to urge members, and more particularly our judges, to give their views in time for next issue of the magazine.

S. M. TOWNSEND.

[It is to be hoped that all interested members will express their views freely, as to the above suggested change; so far as a non-exhibitor may express an opinion, it appears to me, very preferable to and a distinct advance on the present method of awarding medals for "Most Points."—ED.]

NEW MEMBER ELECTED.

S. T. HESELTON, 45, Market Place, Bridlington.

NEW ASSOCIATE ELECTED.

H. COOPER, Hitchin Road, Luton.

PROPOSED FOR ELECTION AS MEMBERS.

ALBERT SUTCLIFFE, Field House, Grimsby.
By R. SUGGITT.
H. PAYNE, The Little Zoo., Lyncombe Hill, Bath.
By The Editor.

PROPOSED FOR ELECTION AS ASSOCIATE.

Miss EDITH BRICKWOOD, 3, Ladies' Lodge, Dunstable, Beds.
By Mrs. WARREN VERNON.

CHANGES OF ADDRESS.

Miss E. BROOKSBANK, Bawtry, Yorkshire.
Mrs. WARREN VERNON, Toddington Manor, Dunstable, Beds.
Miss LOCK, 84A, Salisbury Road, Brondesbury, N.W.

◆

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Mrs. WARREN VERNON, Toddington Park, Beds.

A lady, experienced in the care of birds, undertakes the charge of them during absence of owners.
Miss LOCK, 84A, Salisbury Road, Brondesbury, N.W.

Wanted—Spare numbers of *Bird Notes*, Vol. I., (March, April, May, June, and October). Address the Publishers:
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The Foreign Bird Club.

NOTICES TO MEMBERS.

The Magazine. In accordance with precedent, we shall not publish an August number of the Magazine. Post mortem reports will have to wait over till the September issue, unless the usual postal fee (*vide rules*) is enclosed.

Members attention is drawn to the correspondence, *re* Most Points *v.* Best Bird. It is hoped that all interested in exhibiting will record their vote, so that the poll may be a representative one.

WESLEY T. PAGE,
July 15*th*, 1907. *Hon. Editorial Secretary.*

POINTS *v.* BEST BIRD.

SIR,—I have been asked for some expression of opinion on this rather threadbare subject which Mr. Townsend raises once more in our June issue, and which was thrashed out in the correspondence pages of the first volume of *Bird Notes.*

I am afraid that I have nothing new to say about it. "Best Bird" specials are naturally preferred by the small and medium exhibitor, while point prizes are liked best by large exhibitors, Show Secretaries and Committees, and Judges. It is impossible to please everybody, but the nearest approach to that unattainable ideal might be gained by giving some specials for points and an equal number for best birds.

It should, however, be borne in mind when a Judge has to select the best bird from a number of classes, well-filled with meritorious exhibts, his task is one of extreme difficulty, and his decision is seldom satisfactory to himself or to anyone else. This decision, moreover, is usually made somewhat hurriedly, at the end of an exhausting morning's work of judging, while the Secretary is waiting impatiently for the slips for the printer, and "Little Mary" is reminding the Judge that his usual hour for lunch is long past. HORATIO R. FILLMER.

Sir,—In answer to the above letter, as stated in the June issue, I raised the question of Points *v.* Best Bird at the request of several members.

I may point out that the two members who were large exhibitors, who wrote in favour of most points when the question was discussed before, no longer exhibit or belong to the Club, and that practically there are now no large exhibitors, and also that the wants of the present day exhibitors may differ from those who expressed their opinion in Vol. I of *Bird Notes.*

I do not underrate the difficulty of judging the best bird, but as it is possible to award a first prize in an "Any Other Species" Class like the one at the National Show this year, it should be possible to pick the best bird out of the prize winners. S. M. Townsend.

Sir,—I was pleased to see from the June issue of *Bird Notes* that Mr. Townsend has raised the question of "Most Points *v.* Best Bird." As an occasional exhibitor of foreign birds I am greatly in favour of the Club medal being awarded for the "Best Bird," and I feel quite confident that members generally will fall in with Mr. Townsend's suggested change. I was an exhibitor some time ago at a Show not far from here (Lytham) where one man had upwards of twenty entries, and, of course, was awarded the Foreign Bird Club's silver medal, yet there was not a bird amongst the lot I should have cared to possess and scarcely one in decent condition. Certainly I think merit should win and not numbers. J. H. Harrison.

[Mrs. Warren Vernon and Mrs. Anningson, also Messrs. Swaysland and Camps are in favour of medal being given for best bird.—Ed.]

IMPORTANT.

VOTING *re* BEST BIRD *v.* POINTS.

Members doubtless saw my letter last month on the question of which way our Medals should be awarded, for "points," or for "best bird." The matter is now to be put to the vote.

Will all, therefore, who are interested in exhibiting, record their vote by sending a post card, stating which method they favour, to the Scrutineer, Mr. J. A. Swan, Meadow View, Northcote Road, Sidcup, Kent, before July 31st.

Medals in future will be awarded according to the result of the poll, whether it be large or small; so those interested either one way or the other, are warned not to neglect this opportunity of recording their vote.

S. M. TOWNSEND, *Exhibitional Secretary.*

NEW MEMBERS ELECTED.

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H. PAYNE, The Little Zoo., Lyncombe Hill, Bath.

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O. MILLSUM, Regent Street, Swindon.
By The Editor.

PROPOSED FOR ELECTION AS ASSOCIATE.

J. ACUTT, 114, Uplands Road, East Dulwich.
By S. M. TOWNSEND.

CHANGE OF ADDRESS.

J A. SWAN, Meadow View, Northcote Road, Sidcup, Kent.

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Suitable for outdoor aviary—Red-headed Starling, cock Red-rump, Red-vented Bulbul, and Red-faced Coly. Particulars.
TOWNSEND, 3, Swift Street, Fulham.

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To the Hon. Treasurer,

Mrs. K. L. MILLER, 27, Belgrave Road, London, S.W.

I enclose with much pleasure £ : s.: d. as a donation to this fund.

Name..

Address..

Date..

The Foreign Bird Club.

❧ ❧

NOTICES TO MEMBERS.

It would appear that little interest was taken in the question of Best Bird *v.* Most Points, and also that those who wrote in its favour last month failed to see the necessity of voting, consequently the figures are much smaller than they would have been.

In favour of Best Bird	.. ..	4
,, ,, Most Points	.. ..	2
Majority for Best Bird	.. ..	2

Signed, J. A. SWAN, *Hon. Scrutineer.*

This will necessitate the revision of rules *re* granting of Medals: such will be done, and after ratification by the Council will be duly published.

The Council have decided to open the Bird Market to *non-members*, being of the opinion that the change will be a general convenience. Will members kindly mention BIRD NOTES when corresponding with advertisers?

Attention is drawn to the fact that the Certificates, *re* Breeding results, will be granted from the accounts published in the Magazine. The season is now drawing rapidly to a close, and the Hon. Editor would be glad to receive accounts of members' breeding successes. We would point out that members should fully describe items of diet etc., when sending accounts of their birds, thus adding greatly to their practical utility and interest.

Re the effort to increase our membership—If each member would only send one of the leaflets "Objects of the Club" to all interested in foreign birds, in their locality, we feel assured this object would soon be attained.

WESLEY T. PAGE,
Hon. Editorial Secretary.

Sept. 15*th*, 1907.

TO ILLUSTRATION FUND.

Mrs Warren Vernon	..	£3 0 0
Rev. F. C. Almond..	..	0 10 0
Mr. Miller	..	0 10 0

NEW MEMBERS ELECTED.

O. MILLSUM, Regent Street, Swindon.

NEW ASSOCIATE ELECTED.

J. ACUTT, 114, Uplands Road, East Dulwich.

PROPOSED FOR ELECTION AS MEMBERS.

TINNISWOOD MILLER, 27, Belgrave Road, S. W.

Mrs. E. A. HARTLEY, St. Helen's Lodge, Hastings.

J. MACARTHUR, 69, Upper Kennington Lane, Vauxhall, S.E.
By The Editor.

H. WESTACOTT, Wellington Hotel, Minehead.
By O. MILLSUM.

THE BIRD MARKET.

All advertisements must reach the Editorial Secretary by the 10th of the month. Charge: Members' advertisements, four words a penny; Non-Members, three words a penny.

MEMBERS' ADVERTISEMENTS.

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Mrs. WARREN VERNON, Toddington Park, Beds.

Many-coloured Parrakeet (hen): For sale, in perfect health and condition. Particulars from

Mrs. Miller, 27, Belgrave Road, S.W.

Rare Indian Birds: Advertiser due home the end of March next will endeavour to bring Indian birds if suitable offers are received in time to collect them. The following are in hand or are most likely to be procurable: Himalayan Whistling Thrush, Tickell's and Grey-winged Ouzels, Blue-headed Rock-Thrushes; perhaps Laughing Thrushes, Black, White-cheeked Bulbuls, Dyal, Black (*Pratincola caprata*), and Blue-headed Robins, Red-headed, Black-crested Tits, Zosterops, Goldfinch, Greenfinch, more like Siskin, handsome, hardy, good songster, Redhead Sparrow (*P. rutilans ?*); Buntings, Eastern Meadow, White-capped etc.; Barbet. All the above are Himalayan, and bar the Black and Dyal Robins and Rock-Thrushes, winter in the hills. Crested, Redwing Bush-Larks, Dussumieri Bustard (*pugnax*), Jungle Bush-Quail, Redrump paired to hen Many-colour Parrakeet, Musky Lorikeets, Blue-crowned Hanging Parrakeets; these three pairs have been now over two years in outdoor aviary and would have nested if less crowded. Others, such as Minivets, Niltavas, White-capped Redstarts, may be procurable. None can be absolutely guaranteed so alternative selections are advisable.

Captain G. A. Perreau, 4th Gurkas,
Bakloh, Punjab, India.

For sale — Pair Maroon Tanagers, acclimatized, or hen separately. Wanted — Pair Violet-eared Waxbills.

Pickles, Stoneyhurst, Morecombe.

Wanted—Spare numbers of *Bird Notes*, Vol. I., (March, April, May, June, and October). Address the Publishers:

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NON-MEMBERS' ADVERTISEMENTS.

Rarities: Pair Maroon Tanagers (*Ramphocœlus jacapa*), 63/-; pair Red-breasted Marsh-birds (*Leistes guianensis*), 63/-; odd cock, 35/-; pair Guiana Love-birds (*Psitacula guianensis*), 70/-; cock Lavender-backed Finches (*Spermophila castaneiventris*), very tiny, 40/- & 30/- each; Black-headed Lined Finches (*Spermophila ocellata*), healthy but moulting, 21/- and 17/6 each; cock Fire-Red Finch (*Spermophila minuta*), showing colour, 30/-; pretty Green Sugar-bird, 21/.; perfect hen Black Tanager, 12/6; Black Hangnest, little larger than Blackbird, shines like satin, 30/.; Thick-billed Seed Finch, 20/-; cock Tropical Seed Finches, 20/- & 17/6 each; Dusky Parrot (*Pionus fuscus*), been in England twelve months, £5.

E. W. Harper, 55, Waterloo Road, Bedford.

THE FORTHCOMING SHOW SEASON.

The Show Committee have granted Medals to the following Shows. Other Shows receiving our patronage will be announced in due course.

The Committee hope that members will support Shows where Club Medals are given. Several Societies have written saying that they would give a larger classification if they received more support.

Members are reminded that they *must* put "F. B. C," after each entry.

Any member desiring a Club Medal at any Show they are interested in should ask the Show Secretary to make application for same.

Rochdale Town Hall. October 18th & 19th. Classification for three classes for foreign birds. One Bronze Medal. Judge, Mr. C. A. House. Schedules from Mr. J. Butterworth, Hon. Sec., 28, Smith Street, Rochdale.

Manchester. October 25th & 26th. Classification for four Classes for foreign birds. One Bronze Medal. Judge, Mr. C. Houlton. Schedules from Mr. G. W. F. Lythgoe, 25, Stamford Street, Old Trafford, Manchester.

S. M. Townsend, *Hon. Exhibitional Secretary*,
3, Swift Street, Fulham, S.W.

REGULATIONS AS TO CLUB MEDALS

MADE BY THE SHOW COMMITTEE OF THE COUNCIL.

NOTE.—*Most of these have become obsolete now that Medals are awarded for Best Bird—so till these are revised, the following regulations will hold good.*

1. All Medals shall be given for the Best Bird.

4. Members exhibiting at Shows where Club Medals are given, *must* place the initials "F.B.C." after *each* entry on the entry form, and request the Secretary to insert the same in Show Catalogue.

5. No member shall win more than TWO Medals in one season—one silver and one bronze—or more than ONE Medal at the same Show.

6. No Medal shall be given at any Show, unless the Classification and the name of the Judge be first submitted to and approved by the Committee. Preference shall be given to Shows at which the Club's Classification is adopted and one of the Club's Judges appointed.

7. No Medal shall be given at any Show, where less than THREE Classes for Foreign Birds are provided, and no Silver Medal where less than SIX Classes. The Show Committee reserve the right of waiving this number at their discretion.

9. Medals shall be given at OPEN SHOWS only. Birds in Members' Classes shall not compete.

10. No Medal shall be awarded at any Show unless at least THREE members compete.

NOTE.—*Regulations* 2, 3 *and* 8 *drop out as obsolete.*

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NOTICES TO MEMBERS.

It is very apparent that "Accounts of Aviaries and their Inmates" (with photos. if possible) are of very great general interest, and we shall be glad to receive such, especially from those members who have not yet contributed to this Volume.

Nesting Notes are always of great interest, and we hope members will send in accounts of the season's successes, partial successes, and also failures.

May we ask in all instances, that methods and items of diet may be included in all articles, which most certainly increases their practical value.

WESLEY T. PAGE,
Sept. 15th, 1907. *Hon. Editorial Secretary.*

NEW MEMBERS ELECTED.

TINNISWOOD MILLER, F.Z.S., 27, Belgrave Road, S. W.
Mrs. E. A. HARTLEY, St. Helen's Lodge, Hastings.
J. MACARTHUR, 69, Upper Kennington Lane, Vauxhall, S.E.
H. WESTACOTT, Wellington Hotel, Minehead.

CHANGE OF ADDRESS.

J. HALL, 162, Evering Road, Upper Clapton, London, N.E.

PROPOSED FOR ELECTION AS MEMBERS.

F. CAPERN, Avenue House, Cotham Park, Bristol.
W. T, ROGERS, Weald View, Ongar Road, Brentwood, Essex.
By The Editor.
WM. PYKE, 106, Church Street, Preston.
By J. H. HARRISON.
E. W. HARPER, 55, Waterloo Road, Bedford.
By Mrs. E. WARREN VERNON.

PROPOSED FOR ELECTION AS ASSOCIATES.

Miss M. GREEVEN, 29, Queensborough Terrace, Hyde Park, W.
Miss MILDRED BLACKBURN, 185, Vauxhill Road, Birmingham.
By The Editor.

BALANCE SHEET OF THE FOREIGN BIRD CLUB for 1906-1907.

DR.	£	s.	d.
To Printing..	64	17	5
Postage ..	12	6	5
Coloured and Black and White Illustrations	50	6	11
Binding for *Bird Notes*	1	17	0
Carriage	0	7	9
Publishing	2	15	0
Advertising	0	2	6
Medals ..	0	15	9
Stationery	0	15	0
Cheque Books..	0	5	0
	£134	8	9

CR.	£	s.	d.
By 141 Members' Subscriptions at 10/-	70	10	0
23 Associates' ,, at 5/-	5	15	0
2 Member's Subscriptions 1905 & 1906 at 10/-	1	0	0
3 Member's Subscriptions 1907 & 1908 at 10/-	1	10	0
Entrance Fees	2	17	6
Advertisements ..	3	3	3
Sale of Bound Volumes of *Bird Notes*	4	0	6
,, ,, Current Numbers ,, ,,	2	19	8
,, ,, Coloured Plates	5	9	0
Donations ..	26	10	6
Sales of Cases for *Bird Notes*..	0	19	1
Sundry Receipts..	0	17	0
	£125	11	6
Balance due to Hon. Treasurer	8	17	3
	£134	8	9

L. W. HORTON, *Hon. Treasurer* (1906-1907).

W. GEO. CRESSWELL, *Hon. Secretary* (1906-1907).

Examined and found correct,
HORATIO R. FILLMER, *Hon. Auditor.*

THE BIRD MARKET.

All advertisements must reach the Editorial Secretary by the 10th of the month. Charge: Members' advertisements, four words a penny; Non-Members, three words a penny.

MEMBERS' ADVERTISEMENTS.

"**Noeggusei.**"—New food for softbills, guaranteed to contain no egg. After repeated experiments I have hit upon the right ingredients. Eaten readily, no waste, only requires damping. To be obtained at 2s. per lb., samples 6d., from the sole agent,

Mrs. WARREN VERNON, Toddington Manor, Beds.

Advertiser, due home next March, will endeavour to bring Indian birds if suitable offers are received in time to collect them. See advt. in September issue.

Captain G. A. PERREAU, 4th Gurkas,
Bakloh, Punjab, India.

Wanted—Spare numbers of *Bird Notes*, Vol. I., (March, April, May, June, and October). Address the Publishers:

W. T. MOULTON & Co., 4, Church Street, Brighton.

NON-MEMBERS' ADVERTISEMENTS.

RARITIES: Our Mr. Debon is now on his way from Brazil with many rarities, due to arrive November 3rd. Just arrived from Australia a beautiful consignment of Lories. Blue Mountains 20/- each, Scaly-breasted 25/-, Pennants 18/-, Rosellas 18/- Redrumps 16/- each. Always on hand, many thousands of small foreign aviary birds; six pairs, all different, our selection, in fine condition, 12/-. Amazon Parrots 20/- each. Hartz Mountain Roller Canaries 5/6, Pagoda Starlings 6/- each, finest outdoor-bred Budgerigars, Greens 6/- pair, Yellows 10/- pair, White Java Sparrows 10/- pair, Paradise Whydahs, in full colour, cocks 5/-, pairs 6/6, Pekin Nightingales 3/6 each, Bishops in colour 3/6 and 5/- each. Waxbills, Orange Cheeks, Nuns, Tricolours, Javas, Silverbills, Cutthroats, Weavers, Bronzewings, Combassous, etc., 2/6 pair. Full lists free on application.

DORIA DEBON & Co., 114, Bethnal Green Road, London.

DOES THIS INTEREST YOU? If so, please read. Aviaries from 10/6 to £100. Show Cages of every description of British and Foreign Bird, also made to customers' own designs. For reliable Foods, Seeds, Medicines, see my Illustrated Catalogue, sent free on mentioning this magazine. Also Canaries, Mules, Parrots, &c. Easy payments by joining my Bird Club, distance no object. Show Cases and Hampers all sizes on shortest notice. Patronized by Royalty.

W. RUDD, Bird Specialist, Norwich.

THE SHOW SEASON.

MEDALS

have been granted to the following Shows, in addition to those already announced.

NORWICH.

November 2nd and 4th. Classification for four classes for foreign Birds. One Bronze Medal. Judge: Mr. J. ROBSON. Schedules from Mr R. ROLL, Dalwood, Cecil Road, Lakenham, Norwich.

LEEDS.

November 15th and 16th. Classification for three classes for foreign Birds. One Bronze Medal. Judge: Mr. J. ROBSON. Schedules from Mr. A. WILKINS, The Gardens, Oakhurst, Moortown, Leeds.

NOTTINGHAM.

November 16th and 18th. Classification for four classes of foreign Birds. One Bronze Medal. Judge: Mr. C. HOULTON. Schedules from Mr. G. E. WILKINSON, 9, Wellington Sqnare, Park Side, Nottingham.

S. M. TOWNSEND, *Hon. Exhibitional Secretary*,
3, Swift Street, Fulham, S.W.

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NOVEMBER, 1907.

The Foreign Bird Club.

NOTICES TO MEMBERS.

There is still a need of copy. Just as we are going to press a member writes as follows: "*More copy wanted from the "ordinary or garden member, cannot you wake them up?*" Permit me to emphasize this, and to urge those in possession of Garden aviaries and Bird-rooms, to send on an account of same and their inmates. Nesting notes, food and treatment, should be included in all such accounts. Of course any member can write under a *nom de plume* if they so desire.

We are equally desirous to receive accounts of British birds. Personally I should like to see at least one or two papers on British birds in each issue. Also notes on Wild Life, etc., and photos of Birds, Nests and Eggs in situ, especially those in unusual situations, will be much appreciated.

The Magazine Committee regret being, rather often, a few days late in publishing the issues; this has been unavoidable owing to lack of copy.

WESLEY T. PAGE,

Nov., 15th, 1907. *Hon. Editorial Secretary.*

ALTERATIONS OF RULES.

At a Council Meeting held at Mrs. Leslie Miller's, on October 12th, ult., the following alterations were proposed and unamiously carried; and that the rules be altered accordingly:—

"That Editor, Secretary and Treasurer be elected for a term of three years."

"That Officers be elected only at a meeting of the Council."

"That the price of the Magazine to non-members be fixed at one uniform price of 1/6, as it does not pay to sell copies below that figure; and that the change take place with the first number of next volume."

The only point of difficulty to face was finance, and though this is not immediate, it was very apparent, that unless the members made a fairly liberal response to the appeal for the Illustration Fund, an adverse balance would certainly have to be faced at the end of the Club year. In all other respects the affairs of the Club are in a satisfactory and flourishing condition. A perusal of the Balance Sheet, published in last issue, for the past year, will indicate at once the difficulties of the Committee in respect of finance.

WESLEY T. PAGE,
Hon. Editorial Sec.

THE DEFICIT.

The Committee gratefully acknowledge a donation of £8 17s. 3d., from Mr. L. W. Horton, to clear deficit on last year's account.

CHANGES OF ADDRESS.

E. HOPKINSON, M.A., M.B. Oxon., D.S.O., Bathurst, Gambia, West Africa.

JAMES T. PORTEUS, 10, Alexandra Terrace, Hexham, Northumberland.

W. JEFFS, Pensaru Villas, Victoria Road, Darlaston.

NEW MEMBERS ELECTED.

F. CAPERN, Avenue House, Cotham Park, Bristol.
W. T. ROGERS, Weald View, Ongar Road, Brentwood, Essex.
WM. PYKE, 106, Church Street, Preston.
E. W. HARPER, F.Z.S., M.B.O U., 55, Waterloo Road, Bedford.

NEW ASSOCIATES ELECTED.

Miss M. GREEVEN, 29, Queensborough Terrace, Hyde Park, W.
Miss MILDRED BLACKBURN, 185, Vauxhill Road, Birmingham.

PROPOSED FOR ELECTION AS MEMBERS.

Lady ELLEN DUNN, Fair View, Riverside, Taplow.

P. F. M. GALLAWAY, "Durban," St. Peter's Avenue, Caversham, Reading.

Miss M. A. McWILLIAM, 5, Den Crescent, Teignmouth.

By The Editor.

Mrs. Cowper-Cooper, 36, South Parade, Southsea.
H. Gourlay, Hempshott Park, Basingstake.

By Mrs. E. Warren Vernon.

Miss Drummond Mains, Megginch, Errol, N.B.

By The Hon. M. C. Hawke.

THE BIRD MARKET.

All advertisements must reach the Editorial Secretary by the 10th of the month. Charge: Members' advertisements, four words a penny; Non-Members, three words a penny.

MEMBERS' ADVERTISEMENTS.

"**Noeggusei.**"—New food for softbills, guaranteed to contain no egg. After repeated experiments I have hit upon the right ingredients. Eaten readily, no waste, only requires damping. To be obtained at 2s. per lb., samples 6d., from the sole agent,

Mrs. Warren Vernon, Toddington Manor, Beds.

Advertiser, due home next March, will endeavour to bring Indian Birds if suitable offers are received in time to collect them. See advt. in September issue.

Captain G. A. Perreau, 4th Gurkas,
Bakloh, Punjab, India.

Wanted to exchange a cock Diamond Sparrow, aviary bred, year old, for hen ditto.

Miss Gibbons, Boddington, Cheltenham.

From Aviary, acclimatised, in perfect condition, overcrowded, pair Cutthroats, reared 4 young, 6/6, White Java hen 5/-, pair Pintailed Whydahs 15/6, Brown-throated Cardinal 18/-, Red-vented Bulbul 15/-, pair Cape Sparrows 18/-.

Mrs. Warren Vernon, Toddington Manor, Beds.

Pair of Rosellas, adults, hen bred one hybrid with Adelaide, 30/-, two cock Rosellas 15/- each, two hen Pennants, one 30/- the other slightly hangs one wing 25/-, both have laid this season, pair of adult Cockatiels 10/-, pair of this year's, early bred, 9/-, younger ones 3/- each, Adelaide Parrakeet, been paired to a Lincoln, 60/- pair, Golden Crowned Conure, been paired to a Cockatiel, 20/- pair, hen Port Lincoln, tame, feed from hand, 40/-. All are in outdoor aviary.

Hume, Hepscott, Morpeth.

NON-MEMBERS' ADVERTISEMENTS.

Does this interrest you? If so, please read. Aviaries from 10/6 to £100. Show Cages for every description of British and Foreign Birds, also made to customers' own designs. For reliable Foods, Seeds, Medicines, see my Illustrated Catalogue sent free on mentioning this magazine. Also Canaries, Mules, Parrots, etc. Easy payments by joining my Bird Club, distance no object. Show Cases and Hampers all sizes on shortest notice. Patronized by Royalty. W. RUDD, Bird Specialist, Norwich.

For Sale.—King Bird of Paradise, 1st and Special Watford, Nov. 8th and 9th, 1907, fully acclimatized, outdoor aviary, perfect condition, £30 or near offer. Magpie Tanagers 35/- each, Archbishop Tanagers 20/- each, Scarlets 12/- and 14/- each, Superbs 14/- and 18/- each, Sugar birds 20/- Scarlet Barred Toucans 40/-, Pileated Jay, Show Condition, 15/-, Black Casique 20/-, Ground Thrush 15/- each. Passerine Parrakeets 6/-. pair, Saffron Finches 3/6 pair, Satin Bower Birds £5 each, Bleeding Heart Doves £4 pair, Rosy Cockatoos 7/6 each, Blue Mountain Lories 20/- each, Cockatiels 10/- pair, Love Birds 3/- pair, magnificent adult breeding Budgerigars 6/6 pair, young full-grown aviary-bred Budgerigars 5/- pair, Laughing Jackass 30/- each, Crested Cardinals 5/- each, Black-throated Cardinals 5/6 each, Pope Cardinals 5/- each, Pekin Nightingales 2/0 each, Scarlet Bishops in full colour 4/6 each, Paradise Whydahs in full colour 3/6each, White Javas 10/- pair, White Cockatoos 15/- each. Cutthroats, Bronzewings, Waxbills, Spice Birds, Nuns, Bishops, Silverbills, etc., 2/6 pair, six pairs, all different, 12/-. Bearded Tits 15/- pair, Gold-crested Wrens 5/6 each, Flycatcher 5/6, cock Woodlark 2/-, Blue Nuthatches 7/6, cock Siskins 2/-, German Siskins 2/6, hens 1/-, coch Goldfinches 2/-, Germans 2/6, Russians 3/6, Hawfinches 4/6, Teal 8/6 pair, Garganey 10/- pair, Red-headed Ducks 20/- pair, Black Diving Ducks 20/- pair, Large Heron Gulls5/6 pair, Black Back Gulls 5/6 pair, Common Gulls 3/6 pair, Knots 5/6, Dotterels 6/-, Waterhens 2/0, Dunlins, etc., 5/- pair, Amhurst Pheasants 35/- pair, Silver Pheasants 30/- pair, etc.

Marmonzette Monkeys 15/- each, Squirrels 3/6 each, Dormice 2/6 pair, German Giant Dormice 3/6 pair. Goldfish 9d., 1/-, 2/-, 3/- doz. Large breeding Goldfish 5/- pair. All kinds of fancy fish and aquaria requisites. Ants' Eggs 1/6 lb. Dried Flies 1/8 Best Mealworms 1/6 1,000, 5/6 lb. Cuttlebone 10d. lb. Rush Nests 6d., 9d., 1/- each, Spray Millet 1/6 bundle of 50. Full Price List on application.

D. De Von, 114, Bethnal Green Road, London, E.

THE SHOW SEASON.

MEDALS

have been granted to the following Show, in addition to those already announced. It is hoped that members will send as big an entry as they can, as this Show is giving a larger number of classes for Foreign Bird than any other this season. The Royal Horticultural Hall is an ideal place for a Bird Show, as it is free from draughts and the light is good.

L.C.B.A., ROYAL HORTICULTURAL HALL.

WESTMINSTER. December 6th and 7th. Classification, eleven classes for foreign Birds. Three Silver Medals. Judge: Mr. W. T. Page. Schedules from Messrs. Tyson & Wade, 160, Sloane Street, London

S. M. Townsend, *Hon. Exhibitional Secretary,*

☞ When corresponding with advertizers please mention "Bird Notes."

DECEMBER, 1907.

The Foreign Bird Club.

NOTICES TO MEMBERS.

The current issue brings us within measureable reach of the end of the Vol. and also the Club year. It therefore becomes necessary to call the attention of members to the fact that voting papers for the election of Council and such offices as become vacant annually, *must be issued with the January number*. Will, therefore, any member willing to serve on the Council kindly communciate with me not later than January 1st., 1908.

With great pleasure I acknowledge many kindly appreciations of the efforts to procure Illustrations worthy of our Magazine, with an income totally inadequate for the purpose. I may here perhaps be permitted to point out, that with the next two coloured plates, making six in all, eleven species will have been figured, practically equivalent to a coloured plate per issue; irrespective of the numerous half-tones that have been included. I trust the members generally will show their appreciation of the Committee's efforts in this direction, by subscribing liberally to the Illustration Fund, so that there may be no adverse balance to carry forward.

WESLEY T. PAGE,
Dec., 15*th*, 1907. *Hon. Editorial Secretary.*

THE ILLUSTRATION FUND.

The Committee thankfully acknowledge the following donations to Illustration and Magazine Fund.

	£	s.	d.
Mrs. Anningson	1	1	0
The Hon. Lila De Yarbugh Bateson ..	1	1	0
Mrs. Henry Bromet	1	1	0
The Lady Dunleath	1	0	6
Mr. Fasey	1	0	0
Mr. Henstock	0	10	0
A Member	0	10	0
Mrs. L M. St. A. Wait	0	8	6
Miss C. Rosa Little	0	5	0
Mrs. Rogerson	0	5	0
Mr. T. N. Wilson	0	5	0
	£7	5	0

NEW MEMBERS ELECTED.

Lady Ellen Dunn, Fair View, Riverside, Taplow.
Miss M. A. McWilliam, 5, Den Crescent, Teignmouth.
Mrs. Cowper-Cooper, 36, South Parade, Southsea.
Miss Drummond, Mains of Megginch, Errol, N.B.
P. F. M. Galloway, "Durban," St. Peter's Avenue, Caversham, Reading.
H. Gourlay, Kempshott Park, Basingstake.

PROPOSED FOR ELECTION AS MEMBERS.

A. Walker, M.A., B.Sc., M.D., "Rathgar," Melbourne Avenue, Sheffield.

By Mr. O. Millsum.

Miss Louisa M. St. A. Wait, 13, Rosary Gardens, London, S.W.

R. E. Simpson, 9, Christ Church Avenue, Armley, Leeds.

By The Editor.

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Bakloh, Punjab, India.

From Aviary, acclimatised, in perfect condition, overcrowded, pair Cutthroats, reared 4 young, 6/6, White Java hen 5/-, pair Pintailed Whydahs 15/6, Brown-throated Cardinal 18/-, Red-vented Bulbul 15/-, pair Cape Sparrows 18/-.

Mrs. WARREN VERNON, Toddington Manor, Beds.

Wanted—Hen Orange-breasted Waxbill, and Black-faced Serin, cock. Acclimatised preferred.

Mrs. MILLER, 27, Belgrave Road, S.W.

NON-MEMBERS' ADVERTISEMENTS.

FOR SALE.—Scarlet 12/- and 14/- each, Superbs 14/- each, Pileated Jay 10/-, Saffron Finches 3/6 pair. Satin Bower Birds £5 each, Bleeding Heart Doves £4 pair, Cockatiels 10/- pair, magnificent adult breeding Budgerigars 6/6 pair, young full-grown aviary-bred Budgerigars 5/- pair, Black-throated Cardinals 5/6 each, White Cockatoos 15/- each, Teal 8/6 Garganey 10/- pair, Red-headed Ducks 20/- pair, Black Diving Ducks 20/- pair, Large Heron Gulls 5/6 pair, Common Gulls 3/6 pair, Knots 5/6, Waterhens 2/6, Dunlins, etc., 5/- pair, Amhurst Pheasants 30/- pair, Silver Pheasants 30/- pair, etc. Dormice 2/6 pair, German Giant Dormice 3/6 pair. Goldfish 9d., 1/-, 2/-, 3/- doz. Large breeding Goldfish 5/- pair. All kinds of fancy fish and aquaria requisites. Ants' Eggs 1/6 lb. Dried Flies 1/8 Best Mealworms 2/- 1,000, 5/6 lb. Cuttlebone 10d. lb. Rush Nests 6d., 9d., 1/- each, Spray Millet 1/6 bundle of 50. Full Price List on application.

DE VON, 114, Bethnal Green Road, London, E.

THE SHOW SEASON.

MEDALS

have been granted to the following Shows, in addition to those already announced.

GATESHEAD.

One Bronze Medal.

ST. HELENS.

January 10th and 11th. Classification for three classes of foreign birds. One Bronze Medal. Judge: Mr. C. HOULTON. Schedules from Mr. T. VOSE, 120, Morley Street, St. Helen's, Lancashire.

CORK.

January 15th and 16th. Classification for six classes for Foreign Birds. Two Bronze Medals. Judge, Mr. J. ROBSON. Schedules from Mr. S. O. REILLY, 1, Eileen Villas, Magazine Road, Cork.

S. M. TOWNSEND, *Hon. Exhibitional Secretary,*

REGULATIONS AS TO CLUB MEDALS

MADE BY THE SHOW COMMITTEE OF THE COUNCIL.

NOTE.—*Most of these have become obsolete now that Medals are awarded for Best Bird—so till these are revised, the following regulations will hold good.*

1. All Medals shall be given for the Best Bird.

4. Members exhibiting at Shows where Club Medals are given, *must* place the initials "F.B.C." after *each* entry on the entry form, and request the Secretary to insert the same in Show Catalogue.

5. No member shall win more than TWO Medals in one season—one silver and one bronze—or more than ONE Medal at the same Show.

6. No Medal shall be given at any Show, unless the Classification and the name of the Judge be first submitted to and approved by the Committee. Preference shall be given to Shows at which the Club's Classification is adopted and one of the Club's Judges appointed.

7. No Medal shall be given at any Show, where less than THREE Classes for Foreign Birds are provided, and no Silver Medal where less than SIX Classes The Show Committee reserve the right of waiving this number at their discretion.

9. Medals shall be given at OPEN SHOWS only. Birds in Members' Classes shall not compete.

10. No Medal shall be awarded at any Show unless at least THREE members compete.

NOTE.—*Regulations* 2, 3 *and* 8 *drop out as obsolete.*

JANUARY, 1908.

The Foreign Bird Club.

NOTICES TO MEMBERS.

No one having responded as willing to serve on the Council, the three vacancies occurring therein must be filled by invitation. The Council and Officers for 1908-9 will be published in our next issue, the last of Vol. VI.

The Committee express their thanks for those who have so generously responded to the appeal on behalf of Illustration Fund, but as these constitute but a small portion of our membership, and further help is needed, they respectfully urge those who have not yet subscribed to the fund to do so; all benefit by the increase of text and illustrations in the Magazine, and the Committee hope that there will be a liberal response, it being extremely undesirable that a heavy burden should fall on any one or two, whereas if all will do a little, it will fall heavily on none.

May we urge that the present is a good time to make the effort to materially increase our membership. If each member would see that every Foreign Bird Keeper in their locality is acquainted with the existence and objects, etc., of the Foreign Bird Club, the object would soon be attained. The Editorial Secretary will post a specimen copy of the Magazine to those likely to become members if the addresses of such are sent to him.

Finance is the only cause of difficulty in the Club's affairs, and we feel assured this will soon be surmounted by an increase of membership if all will join in the effort to obtain same. "Many hands make light work" in this and every other section of the Club's affairs, even including copy for the

Magazine. We feel assured that in the effort to send out a Magazine worth circulating, with a small membership and income, we shall have the cordial support and help of all the members. The one difficulty we have to contend with will automatically adjust itself with an increase of membership.

WESLEY T. PAGE,
Jan., 15th, 1908. *Hon. Editorial Secretary.*

THE ILLUSTRATION FUND.

The Committee gratefully acknowledge the following donations to Illustration and Magazine Fund.

	£	s.	d.
W. Bamford	2	0	0
A. Aitchison	0	10	0
N. S. O'Reilly	0	10	0
The Hon. Mrs. Somerset-Ward	0	10	0
R. Suggitt	0	10	0
Miss M. E. Baker	0	5	0
Miss E. Brooksbank	0	5	0
Miss Busteed	0	5	0
Mrs. Dennis	0	5	0
Miss Hincks	0	5	0
Mrs. D. L. Hubbard	0	5	0
Mrs. Mellor	0	5	0
A. Wheeler	0	5	0
	£6	0	0

NEW MEMBERS ELECTED.

A. WALKER, M.A., B.Sc., M.D., "Rathgar," Melbourne Avenue, Sheffield.

Miss LOUISA M. ST. A. WAIT, 12, Rosary Gardens, London, S.W.

R. E. SIMPSON, 9, Christ Church Avenue, Armley, Leeds.

PROPOSED FOR ELECTION AS MEMBERS.

Mrs. E. GALLOWAY, 50, Clarendon Road, Bedford.
By H. R. FILLMER.

Miss M. BOUSFIELD, The Rest, Richmond Park Road, Bournemouth.
By R. SUGGITT.

Mr. DE BRANNEKER, 8, Passage Bonado, à Pau, Basses Pyrénées, France.
By THE EDITOR.

Dr. HENRY HETLEY, Beaufort House, 114, Church Road, Norwood, S.E.
By S. M. TOWNSEND.

Mr. HUGH WORMALD, Heathfield, East Dereham, Norfolk.
By W. E. TESCHEMAKER.

THE BIRD MARKET.

All advertisements must reach the Editorial Secretary by the 10th of the month. Charge: Members' advertisements, four words a penny; Non-Members, three words a penny.

MEMBERS' ADVERTISEMENTS.

From Cold Bird Room, all acclimatized, healthy birds, overcrowded, 1 pair Diamond Sparrows 25/-, 2nd Westminster, 1 Cingola cock 15/-, pair Cape Sparrows 20/-, pair Cordon Bleus and odd cock, this year's young, 20/- three, Paris Waxbills, St. Helena, Orange-cheeked, 10/- pair, pair Pekins, lovely singers, 20/-, pair Ribbon Finches 10/-, pair Green Avadavats, reared 2 young last year, 15/-, cock Pileated Finch 16/-, cock Red-head Finch, 20/-, pair Pintail Whydahs, 15/-.

Mrs. WARREN VERNON, Toddington Manor, Beds.

Pair of Purple Cap Lories, beautiful and rare, price £3 10s.

Captain SMITHWICK, Nenagh.

Wanted—One or two Cock New Zealand Parrakeets, or would exchange a hen for a cock in perfect condition. Young Redrumps for disposal, 25/- pair.

A. SAVAGE, 3, Rue Bihorel, Bihorel-Rouen, France.

NON-MEMBERS' ADVERTISEMENTS.

FOR SALE.—Bell Birds £5 a pair, Magpie Tanagers 25/- each, Scarlets 25/- each, Half-moon Parrakeets 10/- a pair, Firefinches, Cordon Bleus 3/6 pair, Green Doves 10/- pair, Crested Doves 18/- pair, Necklace Doves 18/- Bronzewing Doves 10/- pair, Jays 4/6 each, Dwarf Finches 7/6 pair, Pekin Nightingaless 3/- pair, a few selected cocks, in song, 3/6 each, Storks 50/- pair, Spoonbills 40/- pair, Pileated Jay 10/-, Saffron Finches 3/6 pair, Satin Bower Birds £5 each, Bleeding Heart Doves £4 pair, Cockatiels 10/- pair, magnificent adult breeding; Budgerigars 6/6 pair, young full-grown aviary-bred Budgerigars 5/- pair, Yellows 10/- pair, White Cockatoos 15/- each, Teal 8/6, Garganey 10/- pair, Red-headed Ducks 20/- pair, Black Diving Ducks 20/- pair, Large Heron Gulls 5/6 pair, Common Gulls 3/6 pair, Knots 5/6, Waterhens 2/6, Dunlins, etc., 5/- pair, Amhurst Pheasants 30/- pair. Silver Pheasants 30/- pair, etc. Dormice 2/6 pair, German Giant Dormice 3/6 pair. Goldfish 9d., 1/-, 2/-, 3/- doz. Large breeding Goldfish 5/- pair. All kinds of fancy fish and aquaria requisites. Ants' Eggs 1/6 lb. Dried Flies 1/8 Best Mealworms 2/- 1,000, 5/6 lb. Cuttlebone 10d. lb. Spray Millet 1/6 bundle of 50. Full Price List on application.

DE VON, 114, Bethnal Green Road, London, E.

POST-MORTEM EXAMINATIONS.

The conditions upon which these will be made by Mr. Hy. Gray, M.R.C.V.S., 23, Upper Phillimore Place, Kensington, W., are as follows:

(1) The birds must be sent IMMEDIATELY after death.

(2) They *must* be packed in a box.

(3) *The letter accompanying them must* NOT *be placed in the box along with the bids.*

(N.B. Unless the above conditions are complied with the package will be destroyed without examination).

(4) The letter must detail *as far as possible* all particulars as to (*a*) date of death,
(*b*) length of illness,
(*c*) symptoms of illness,
(*d*) lodgment and feeding of birds, and
(*e*) especially as to whether egg food or inga seed has been given.

(5) The work will be done gratuitously, and a report published in "Bird Notes," but *under no circumstances whatever will a report be sent by post unless a fee of* 2/6 *accompanies the letter and bird.* Pressure of work compels Mr. Gray to make this an invariable rule, and it applies to all members whether they are personally acquainted with him or not.

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FEBRUARY, 1908.

The Foreign Bird Club.

NOTICES TO MEMBERS.

With this issue is completed our sixth volume, which contains five coloured plates. We had hoped to have had six, and though this has not been possible, we have one of the largest and most lavishly illustrated volumes yet published.

The Hon. Editor regrets one or two errors in English that have crept in, but he has done the best with the limited leisure at his disposal, and hopes that in the next volume these blemishes will not be found.

With the March issue the size of the Magazine will be increased to 9in. by 6in. to give fuller scope to the artist when preparing the coloured plates.

It is hoped that by the cordial co-operation of the members, and also the assistance of those concerned in the production of the coloured plates, to include at least eight in the next volume. There already appears to be a very reasonable prospect that our numbers will be very materially increased during the ensuing year.

The Committee tender their best thanks to all who have contributed to the Magazine during the year, and more especially to Mr. Ivan Murray who has kindly prepared the greater part of the Indices; and Mr. Henstock for valuable assistance in the reading of proofs.

We would remind members that our pages are open for contributions (articles or correspondence) on all species of birds, both Foreign and British. Mr. Goodchild will illustrate the coming volume with rare and beautiful species, mostly, it is hoped, from living specimens in the possession of our members. We tender our best thanks to Mr. Gray, the Club's Honorary Veterinary Surgeon, for his services during the year, the extent of which I fear none but a professional man can fully appreciate.

To Mrs. Miller, the retiring Hon. Treasurer, we tender our sincere thanks for the valuable help she has rendered, the full extent of which perhaps none can better appreciate than the Hon. Editorial Secretary. Her kindly and methodical help has made much lighter than it would have been, the ardous task of the past year.

The price of future bound volumes, including Vol. VI., will be 15/- to members and 20/- to non-members. The price of the Magazine to non-members will be 1/6 monthly.

IMPORTANT.

Will members kindly note that subscriptions become due on March 1st, and are payable in advance. We ask for a prompt remittance, that there may be, neither a needless drain on the resources of the Club, nor yet on the Hon. Editorial Secretary's time.

WESLEY T. PAGE,
Feb. 15th, 1908. *Hon. Editorial Secretary.*

THE ILLUSTRATION FUND.

The Committee gratefully acknowledge the following donations to Illustration and Magazine Fund.

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Vol. VI. No. 1. MARCH, 1907.

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Vol. VI. No. 2. APRIL, 1907.

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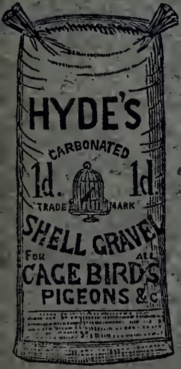
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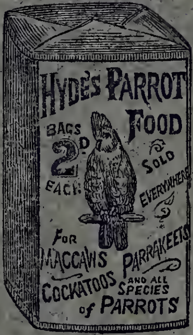
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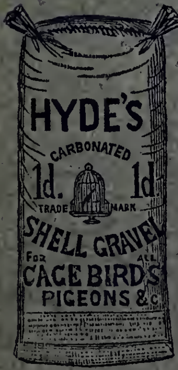
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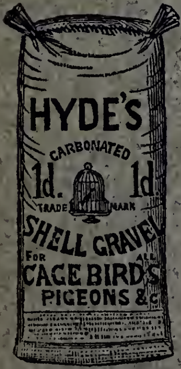
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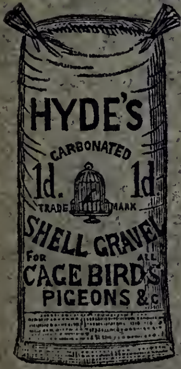
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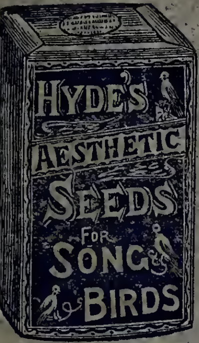
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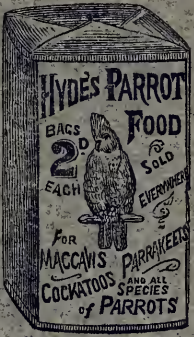
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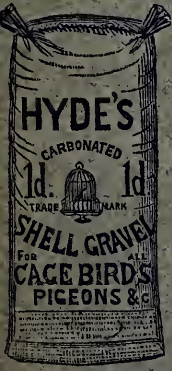
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